

Traffic Quality on the Atlanta Regional Highway Network

VOLUME TWO: ARTERIALS (2010)

Prepared for
The Georgia Department of Transportation
by Skycomp, Inc. (Columbia, Maryland)

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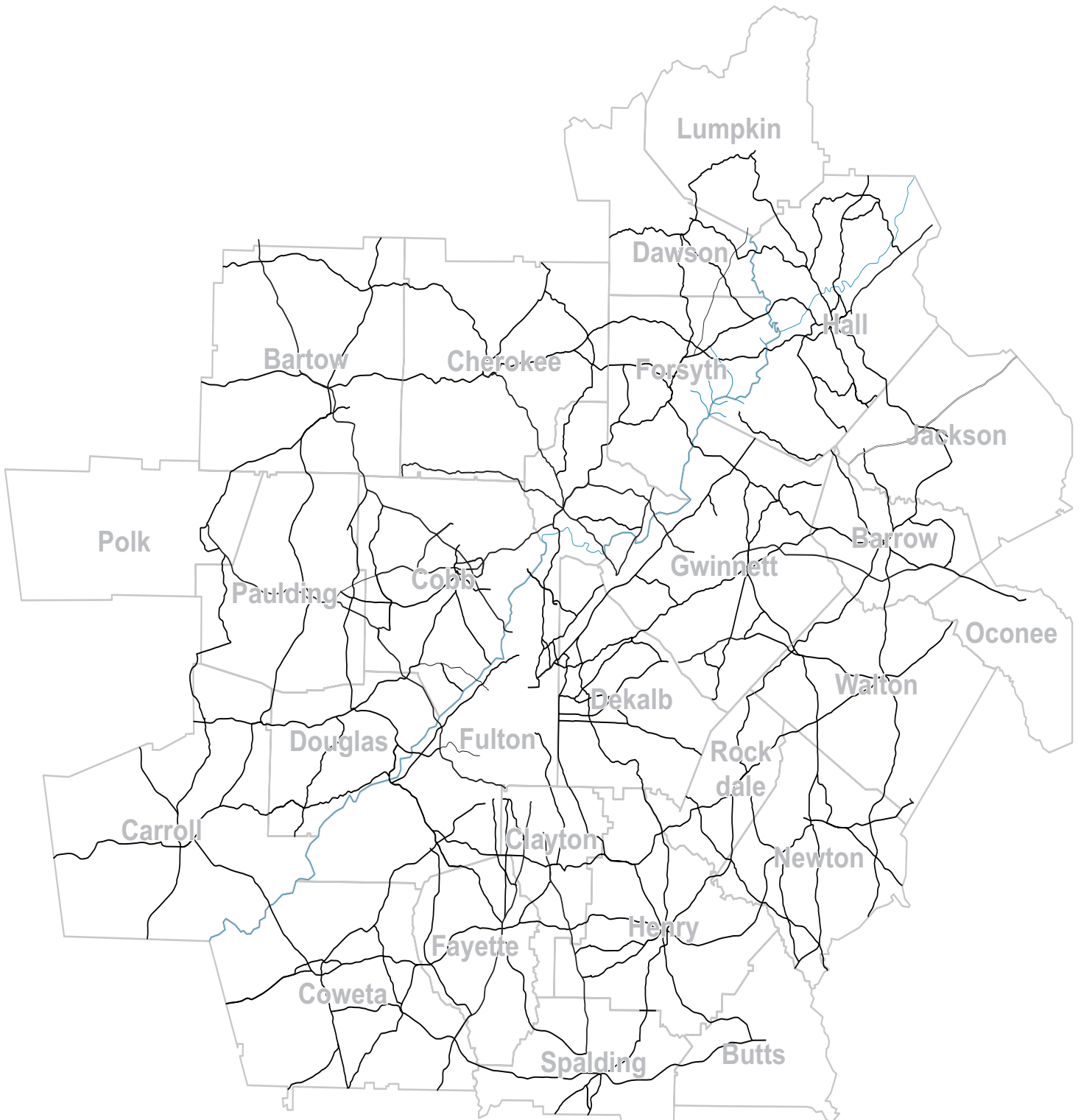
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ARTERIAL NETWORK

2010



INTRODUCTION

The purpose of this aerial survey program is to rate the performance of the regional Atlanta highway system on a recurring basis, and to provide related data to regional planners, stakeholders, and decision-makers. This mobility-monitoring program began in the fall of 1998, at which time approximately 500 centerline miles of limited-access and arterial highway in the Atlanta metropolitan area were surveyed (data collection occurred during both morning and evening peak commuter periods). Coverage was repeated three years later, in the fall of 2001, leading to an identification of locations experiencing both improved and degraded mobility.

The early success of this survey program resulted in decisions to expand coverage out to the boundaries of the larger (21-county) Atlanta planning region. Extending the boundaries of the survey region involved approximately 250 miles of freeways that had not yet been surveyed. In the spring of 2002, these extended segments were photographed, utilizing the same methodology of the previous surveys.

In the spring of 2004, the scope of coverage was extended further to include an additional 1,500 miles of high-volume signalized arterial highways from throughout the 21-county planning area. This regional arterial network, together with the extended primary network, forms the backbone of the region's state highway transportation system.

In the fall of 2005, the extended highway segments from 2002 were added to the original segments from 1998 and 2001, and the combined network (approximately 750 miles) was surveyed once again.

Survey coverage of the entire system (approximately 2250 miles) was repeated in the fall of 2007 and the spring of 2008. During the spring and fall of 2010 the entire system was surveyed once again, this time covering 2650 miles of highways in the Atlanta metropolitan area (approximately 400 miles of highway was added to the system in 2010).

The aerial survey methodology takes advantage of the mobility and vantage point of fixed-wing aircraft, permitting data collection across a vast highway network that could not be affordably accomplished using traditional ground-based survey methods. During each survey period, up to twenty aircraft at a time followed designated routes along the primary highways; each highway segment is photographed in its entirety approximately 24 times. Performance ratings derived from the photography are presented in this report in graphical format.

For the purpose of presentation in a logical format, the findings of the 2010 survey iteration have been grouped into two volumes: *Volume One* presents all findings related to the freeway system. *Volume Two* presents all findings related to signalized (interrupted-flow) arterial state highways.

FEATURES OF THE AERIAL SURVEY PROGRAM

During this aerial survey program, overlapping photographic coverage was obtained for each designated highway, repeated once an hour over four mornings and four evening commuter periods. The morning coverage time was 6:30-9:30 a.m., and the evening time was 4:00-7:00 p.m. Survey flights were conducted on weekdays, excluding Monday mornings, Friday evenings and mornings after holidays. Data were extracted from the aerial photographs to measure average recurring daily traffic conditions by link and by time period. Features of the aerial survey program include:

1) Report of findings: Highway Performance Rating Tables, Volumes One and Two, 2010

Volume One presents performance-rating tables of 2010 traffic conditions on the region's freeway sub-system. The ratings are presented by highway, highway segment, direction, and time period. For these uninterrupted-flow facilities, the ratings are density-based level-of-service (LOS) designations "A", "B", "C", "D", "E" and "F", as defined in the 2010 Highway Capacity Manual. Details on how these level-of-service ratings were generated are provided in *Appendix A* of *Volume One*.

Volume Two presents performance-rating tables of 2010 traffic conditions on the backbone of the region's signalized arterial sub-system. For these interrupted-flow facilities, a surrogate level-of-service measure has been used, based on the size of vehicle platoons and the degree of queuing at signalized intersections. Details on how these surrogate level-of-service ratings were generated are also provided in *Appendix A* of *Volume Two*.

The performance rating tables in *Volume One* and *Volume Two* also contain arrowheads that depict locations of recurring congestion; narratives that clarify the severity and frequency of the congestion accompany each arrowhead. Where evident, apparent causes of the problems are also described.

2) Special Summary Report: Mobility Assessment and Bottleneck Changes, 2010 vs. 2007/2008

The *Mobility Assessment and Bottleneck Changes Report* compares conditions found during the 2010 and 2007/2008 surveys. Previous reports compared 2008 with 2005 and 2005 with 2001. These special reports summarize the state of mobility on the network as of the current survey year; and they highlight the specific bottleneck improvements and degradations that have been documented over the course of the survey program. These reports present extended “bottleneck” and “comparative” arrowhead maps that depict the location and typical extent of congested bottlenecks. “Before” and “after” highlight aerial photographs are also provided in many cases to illustrate major changes on the system.

3) Web-Based Module for the GDOT web site

The web-based product presents data collected from all 2,650 miles of surveyed highway; this product allows data queries from each of the surveyed years, and includes thousands of highlight aerial photographs of congestion found in the region. This product also contains detailed “bottleneck” and “comparative” arrowhead maps that highlight exactly where congestion was found on the system during each survey iteration. The product can be viewed over the Internet for private or group use; the interactive feature allows a presenter to respond to audience interests by going to specific locations as appropriate. This product also supports digital downloads of all reports created over the course of this survey program. Lastly, a data extraction module allows users to create graphic displays and download performance-rating tables based on user-selected filters.

4) Survey Database

A primary deliverable for this project is the *Survey Database*, built for the *Microsoft Access*™ platform. This database contains all of the data collected from the aerial survey program, including vehicle counts and road segmentation, flight times and dates, and the highway segment measurements used to calculate freeway densities. Using this database, a number of reports can be displayed or printed, including day-by-day comparative reports, segment densities, and incident information.

5) Speed/Density Relationship on freeways

In order to allow the estimation of vehicle speeds from densities on the freeways, Skycomp has built a database from data collected in the Washington D.C. metropolitan area and other cities. This database demonstrates the relationship between traffic densities and speeds. From this database, a look-up table was developed relating the two variables. The result of Skycomp’s work is provided in *Appendix B*.

DISCLAIMER

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QUESTIONS

If there are any questions about this survey program or the underlying methodology, please direct them to Greg Jordan at 410-884-6900.

Part One - Performance Ratings (ARTERIALS)

Performance Rating Tables, 2010

This section of the report presents performance rating tables of 2010 traffic conditions on the region’s arterial sub-system. The ratings are presented by highway, highway segment, direction and time period. For clarification, these performance rating tables also contain arrowheads that depict the typical extent and location of recurring congestion. Details on how these level-of-service ratings were generated are provided in *Appendix A*.

Performance Rating Descriptions: ARTERIALS

For interrupted-flow facilities, a surrogate level-of-service measure has been used. Developed by Skycomp for use with overlapping aerial photographs, this surrogate measure is based on platoon sizes and queuing characteristics at signalized intersections. Because this is a surrogate LOS measure, the letters “A” through “F” have been underlined to identify them as surrogate LOS measures. A summary of the surrogate level-of-service is provided below (a more detailed discussion is provided in Appendix A).

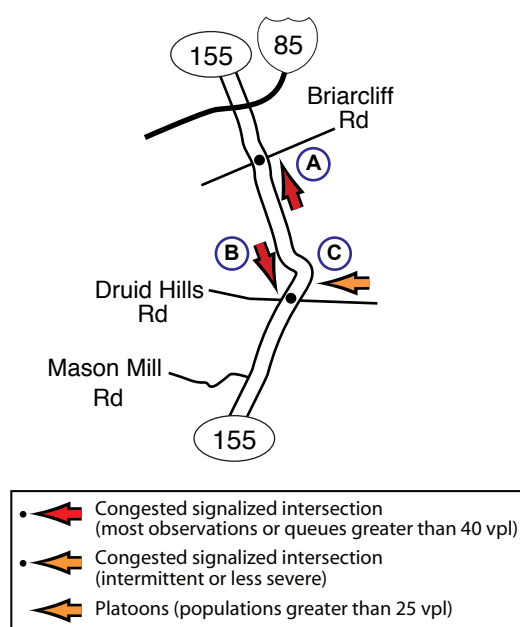
Signalized Arterial Highways:

| | | | | | | |
|------------------------------------|------------|----------|----------|----------|-----------|----------|
| Traffic Condition | Very Light | Light | Moderate | Heavy | Congested | Severe |
| Performance Rating (surrogate LOS) | <u>A</u> | <u>B</u> | <u>C</u> | <u>D</u> | <u>E</u> | <u>F</u> |

Bottleneck Graphics and Analytical Notes

Each performance rating table includes arrowheads that depict locations where congestion was found; notes that clarify the frequency and severity of the congestion accompany each arrowhead. Examples from the report are provided below.

Signalized Arterial Highways

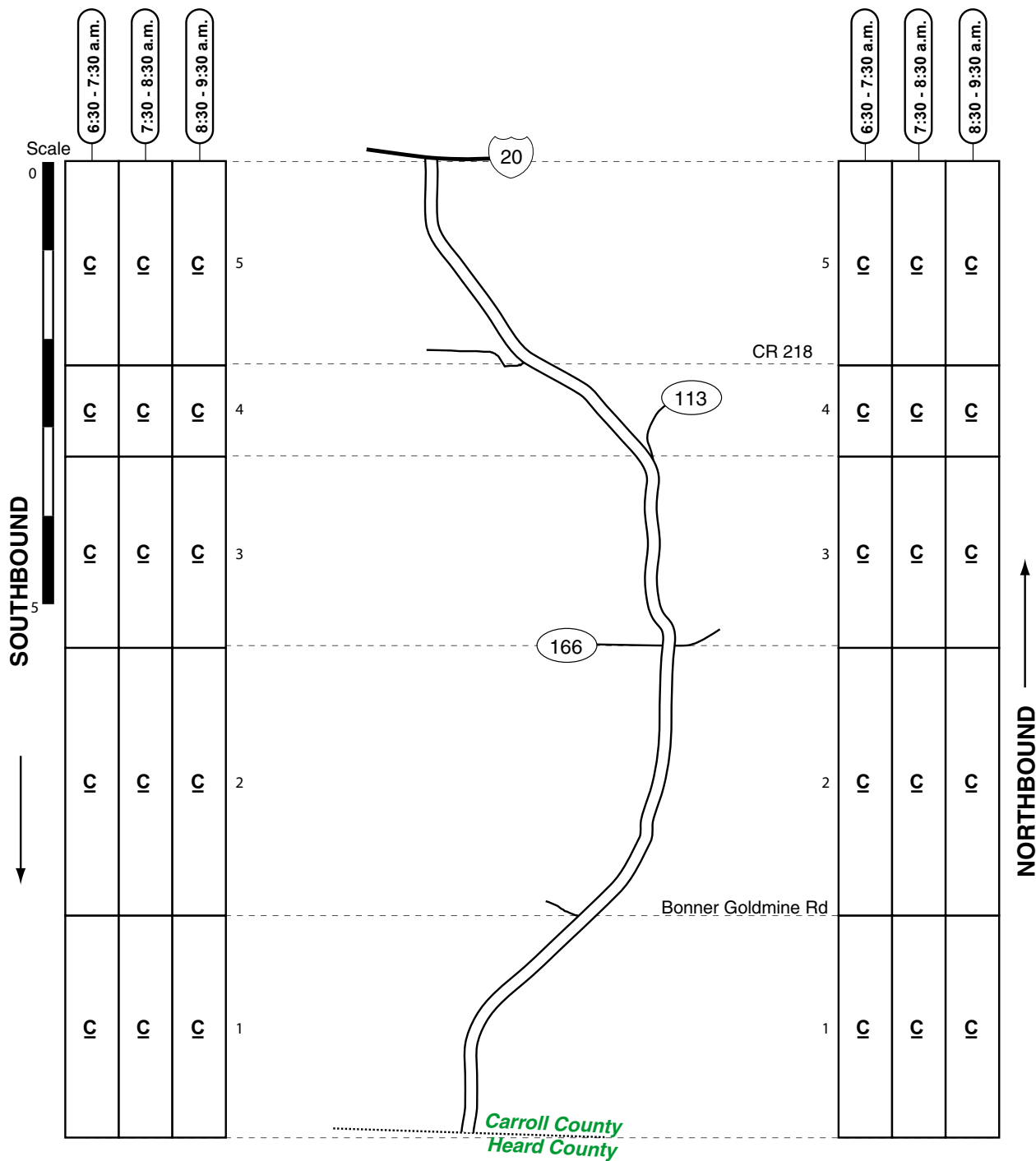


A
Congestion Type: Mainline Signal Queue
Location: Briarcliff Rd
Frequency: Peak Hour
Direction: Northbound
Queue Population: 20 to 30 vpl
Number of Lanes: 2

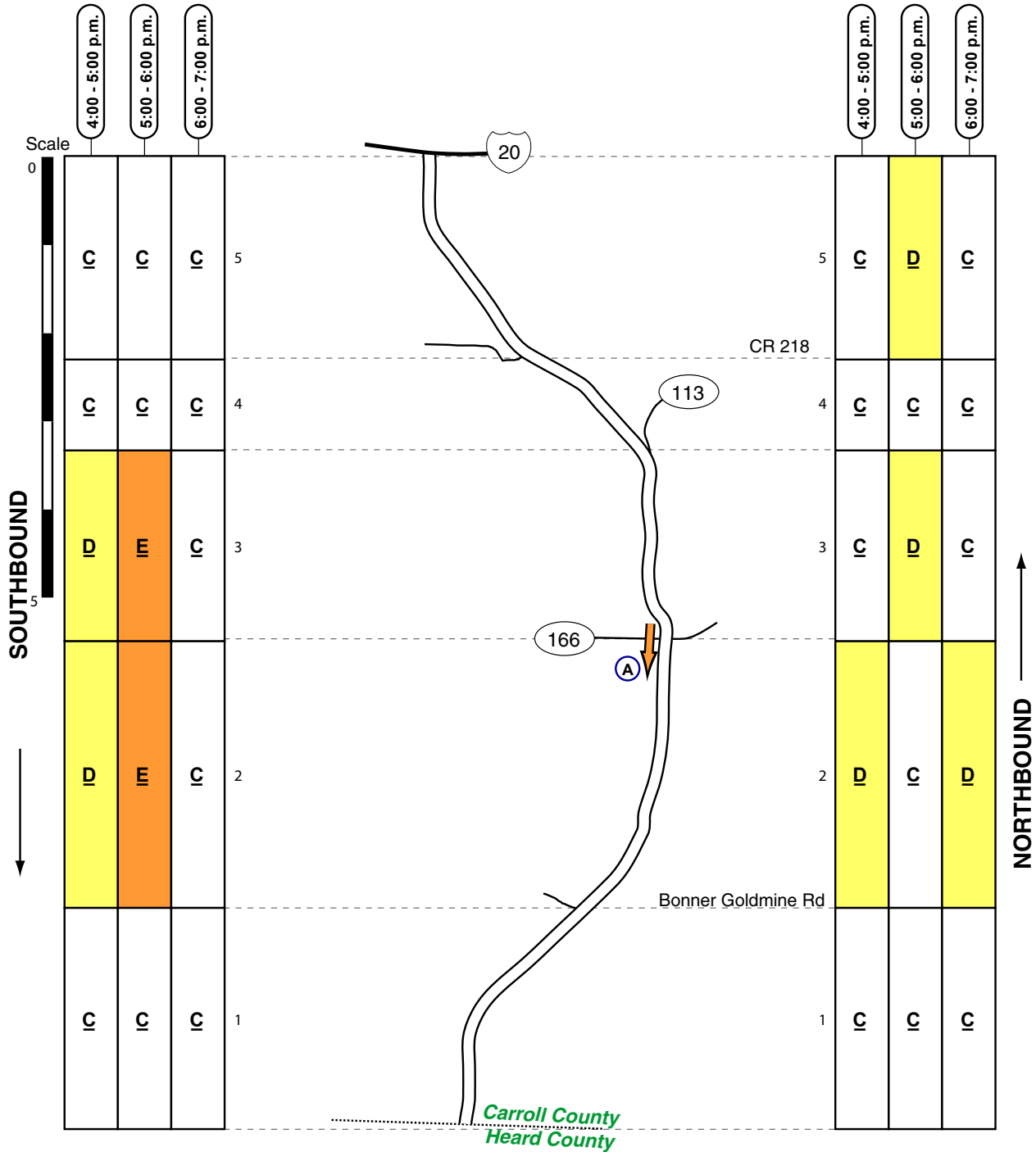
B
Congestion Type: Mainline Signal Queue
Location: Druid Hills Rd
Frequency: Peak Hour
Direction: Southbound
Queue Population: 20 to 30 vpl
Number of Lanes: 2

C
Congestion Type: Cross Road Signal Queue
Location: Druid Hills Rd
Frequency: Intermittent
Direction: Westbound
Queue Population: 20 to 40 vpl
Number of Lanes: 2

SR 1 (Carroll County) - Morning



Spring 2010 SR 1 (Carroll County) - Evening

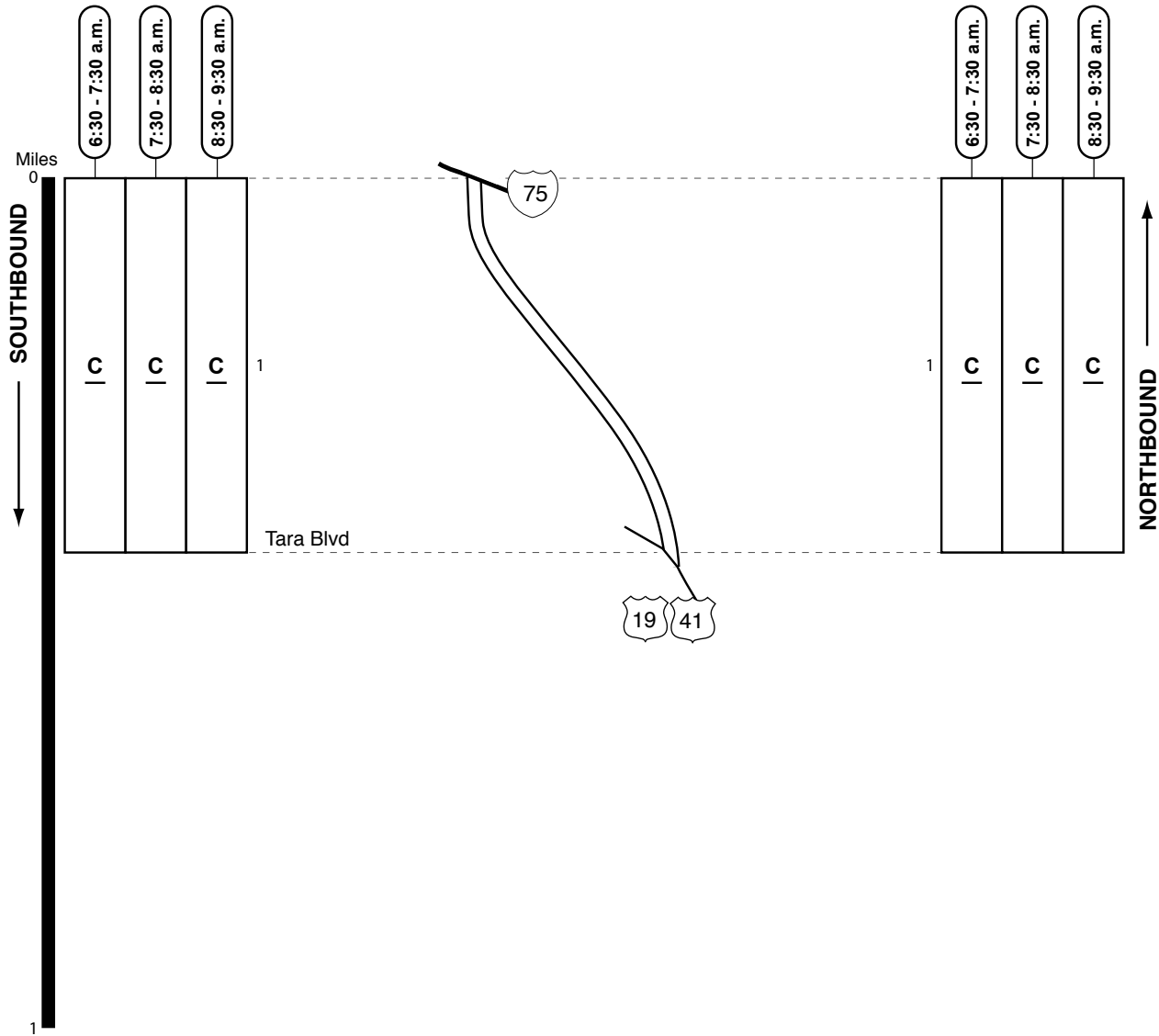


A
Congestion Type: Platoons
Location: Vicinity of SR 166
Frequency: Intermittent
Direction: Southbound
Platoon Population: 25 to 30 vpl
Number of Lanes: 2
Note: During one observation, congestion was found in the dedicated left-turn lane to EB SR 166; the queue contained approximately 20 vehicles.

Arterial LOS Legend

| A | B | C | D | E | F |
|------------|-------|----------|-------|-----------|--------|
| Very Light | Light | Moderate | Heavy | Congested | Severe |

SR 3 (Clayton County) - Morning

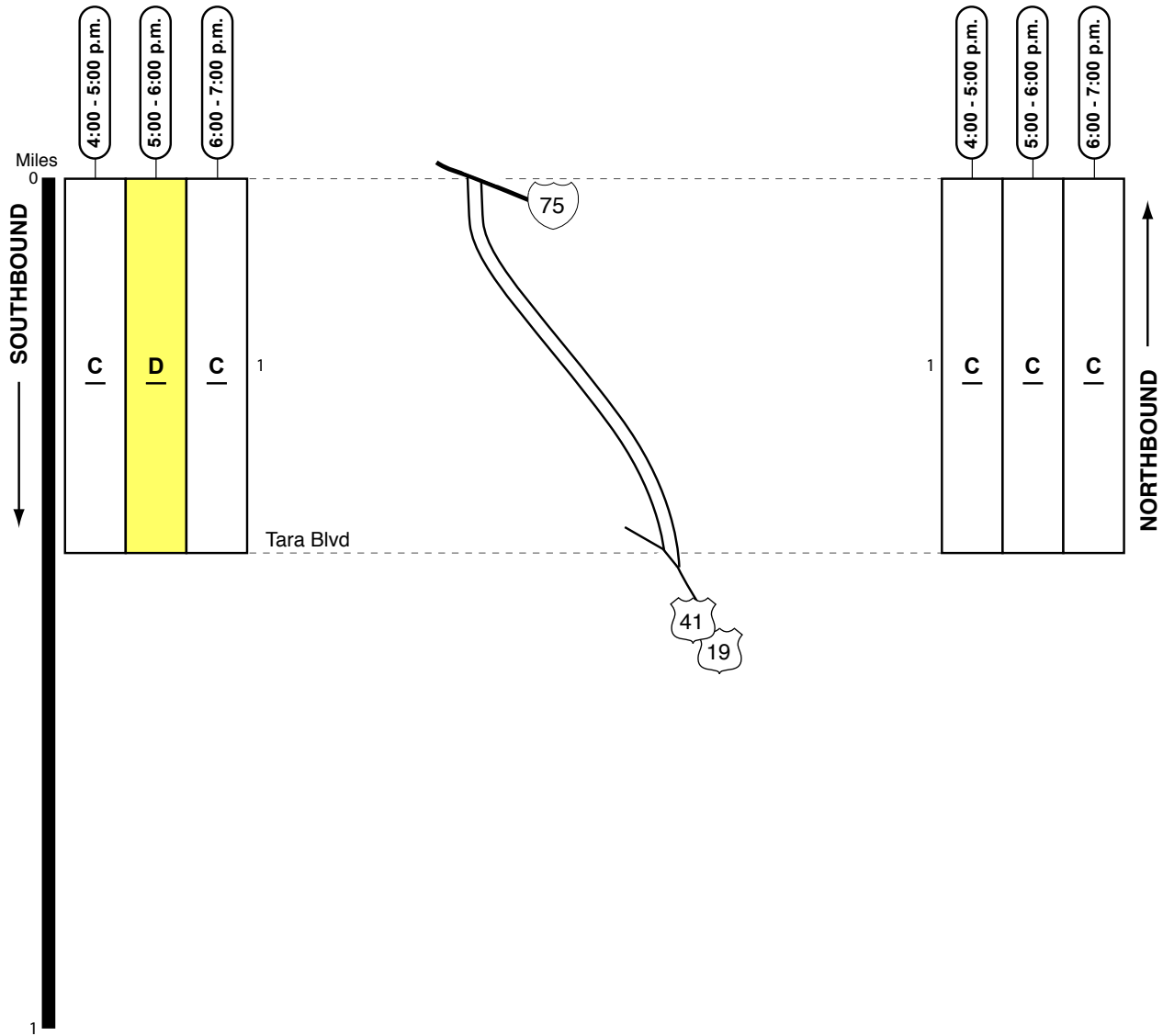


Arterial LOS Legend

| A | B | C | D | E | F |
|------------|-------|----------|-------|-----------|--------|
| Very Light | Light | Moderate | Heavy | Congested | Severe |

Spring 2010

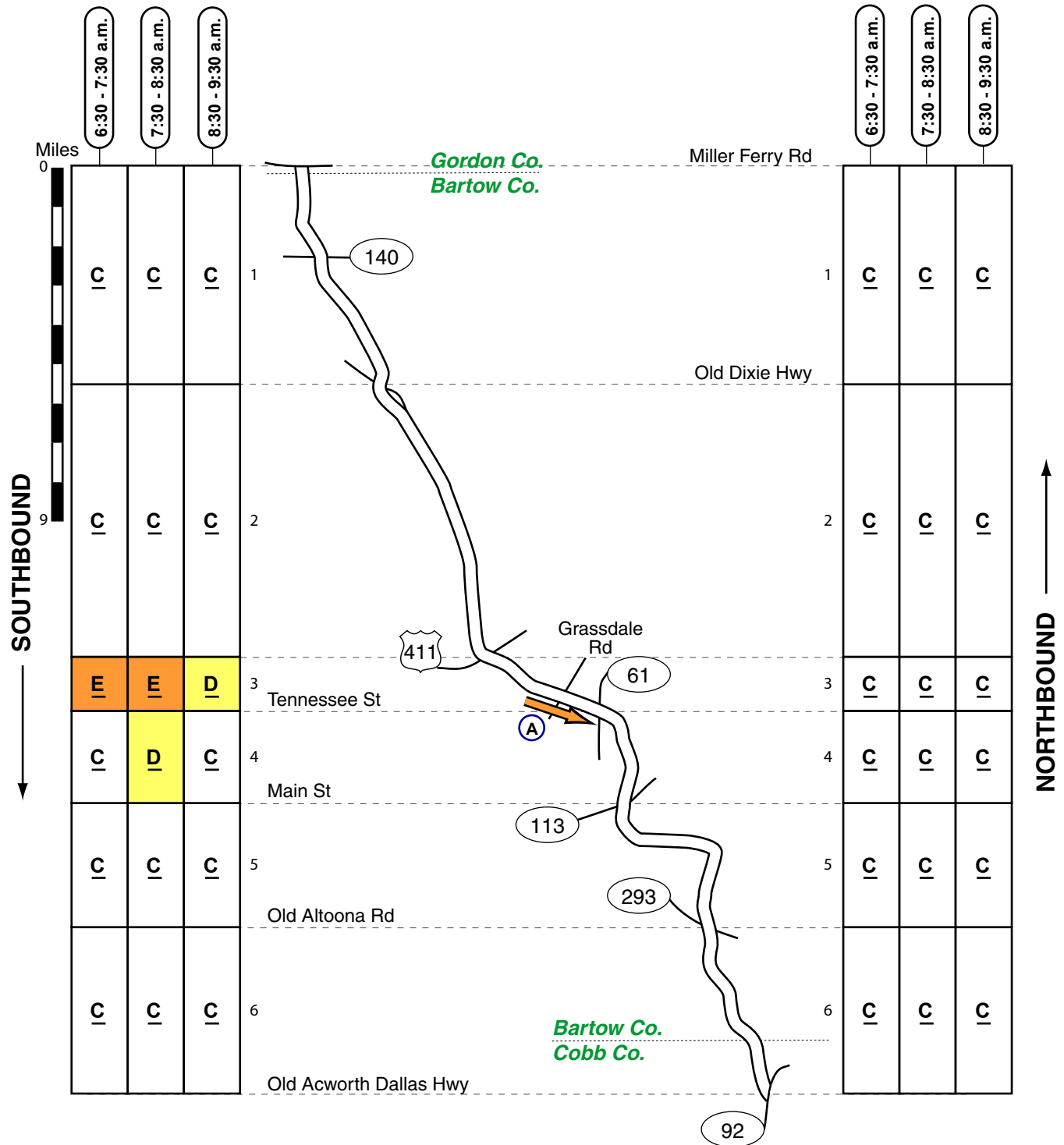
SR 3 (Clayton County) - Evening



Arterial LOS Legend

| A | B | C | D | E | F |
|------------|-------|----------|-------|-----------|--------|
| Very Light | Light | Moderate | Heavy | Congested | Severe |

SR 3/US 41 (Bartow & Cobb Counties) - Morning

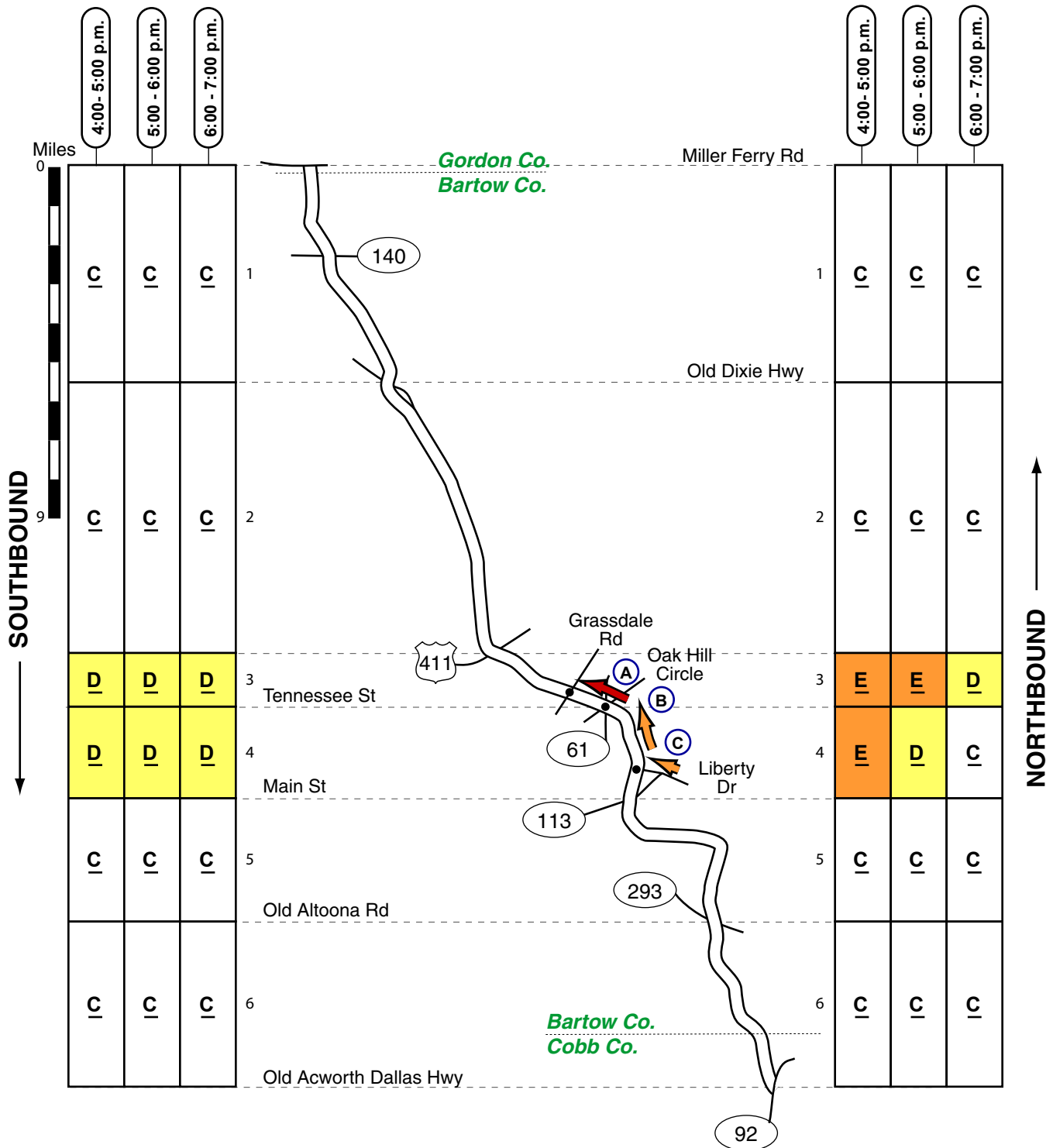


A
 Congestion Type: Platoons
 Location: Between US 411 & SR 61
 Frequency: Most Observations
 Direction: Southbound
 Platoon Population: 25 to 35 vpl
 Number of Lanes: 2

Arterial LOS Legend

| A | B | C | D | E | F |
|------------|-------|----------|-------|-----------|--------|
| Very Light | Light | Moderate | Heavy | Congested | Severe |

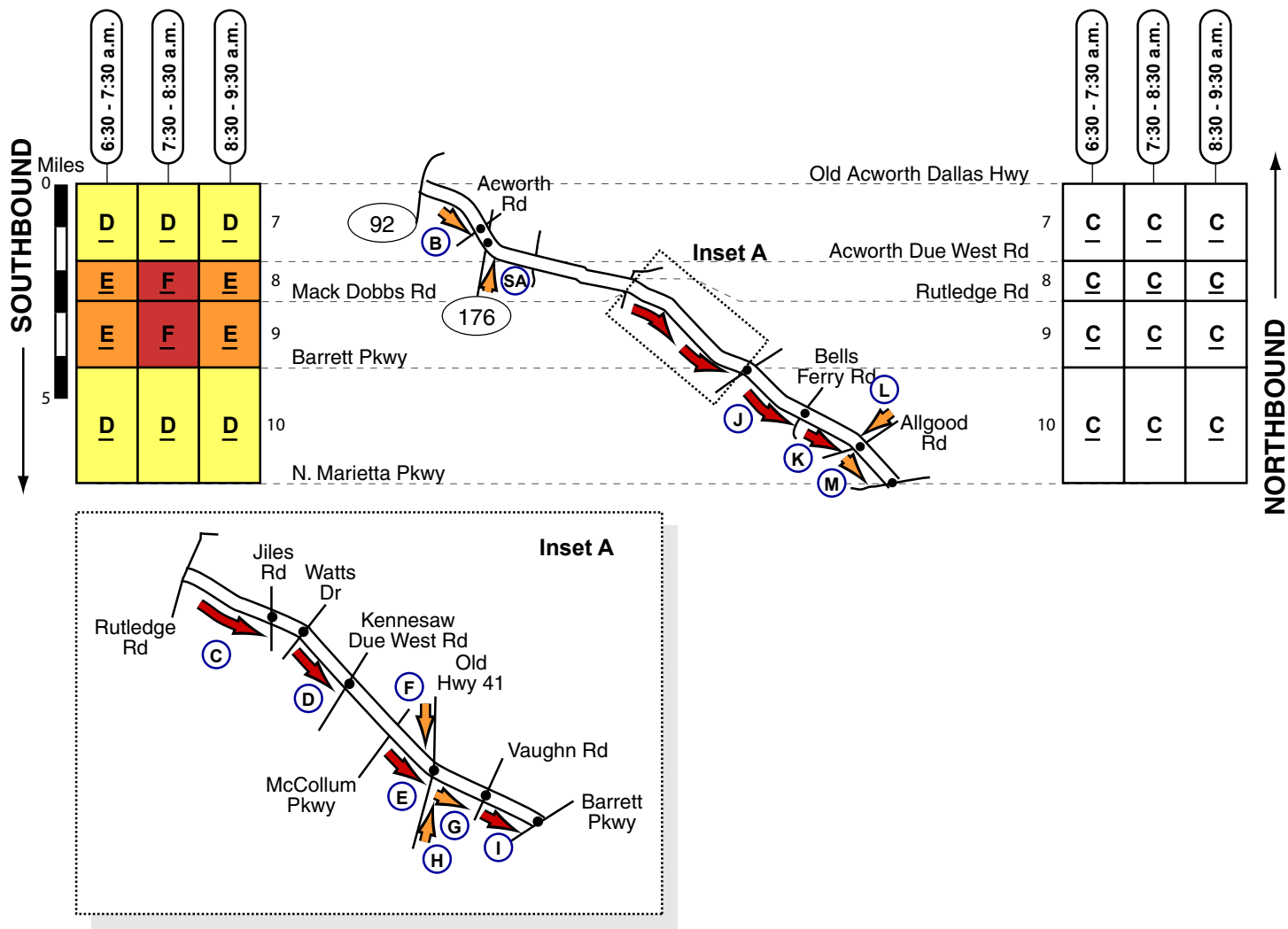
SR 3/US 41 (Bartow & Cobb Counties) - Evening



Arterial LOS Legend

| A | B | C | D | E | F |
|------------|-------|----------|-------|-----------|--------|
| Very Light | Light | Moderate | Heavy | Congested | Severe |

SR 3/US 41 (Cobb County) - Morning



SR 3/US 41 (Cobb County) - Morning

B

Congestion Type: Left-Turn Queue
 Location: Acworth Rd
 Frequency: Intermittent
 Direction: Southbound
 Queue Population: 20 to 25 vpl
 Number of Lanes: 1
 Note: When congested, vehicles were queued in the left lane of two dedicated left-turn lanes.

C

Congestion Type: Mainline Signal Queue
 Location: Jiles Rd
 Frequency: Peak Hour
 Direction: Southbound
 Queue Population: 20 to 60 vpl
 Number of Lanes: 2

D

Congestion Type: Mainline Signal Queue
 Location: Kennesaw Due West Rd
 Frequency: Most Observations
 Direction: Southbound
 Queue Population: 20 to 40 vpl
 Number of Lanes: 2

E

Congestion Type: Mainline Signal Queue
 Location: Old Hwy 41
 Frequency: Most Observations
 Direction: Southbound
 Queue Population: 20 to 40 vpl
 Number of Lanes: 2

F

Congestion Type: Cross Road Signal Queue
 Location: Old Hwy 41
 Frequency: Intermittent
 Direction: Southbound
 Queue Population: 20 to 40 vpl
 Number of Lanes: 1

G

Congestion Type: Mainline Signal Queue
 Location: Vaughn Rd
 Frequency: Intermittent
 Direction: Southbound
 Queue Population: 20 to 30 vpl
 Number of Lanes: 2

H

Congestion Type: Cross Road Signal Queue
 Location: Old Hwy 41
 Frequency: Intermittent
 Direction: Northbound
 Queue Population: 20 to 30 vpl
 Number of Lanes: 1

I

Congestion Type: Mainline Signal Queue
 Location: Barrett Pkwy
 Frequency: Peak Hour
 Direction: Southbound
 Queue Population: 20 to 40 vpl
 Number of Lanes: 2

J

Congestion Type: Mainline Signal Queue
 Location: Bells Ferry Rd
 Frequency: Peak Hour
 Direction: Southbound
 Queue Population: 20 to 70 vpl
 Number of Lanes: 2

K

Congestion Type: Mainline Signal Queue
 Location: Allgood Rd
 Frequency: Most Observations
 Direction: Southbound
 Queue Population: 20 to 50 vpl
 Number of Lanes: 2

L

Congestion Type: Cross Road Signal Queue
 Location: Allgood Rd
 Frequency: Intermittent
 Direction: Southbound
 Queue Population: 20 to 30 vpl
 Number of Lanes: 1

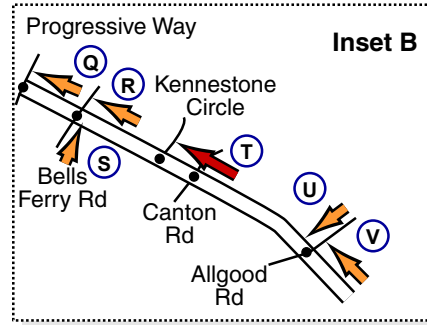
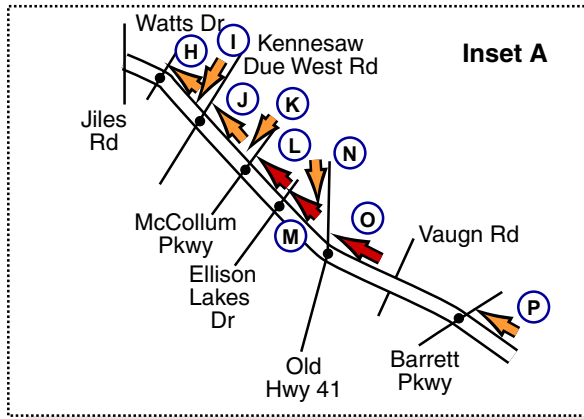
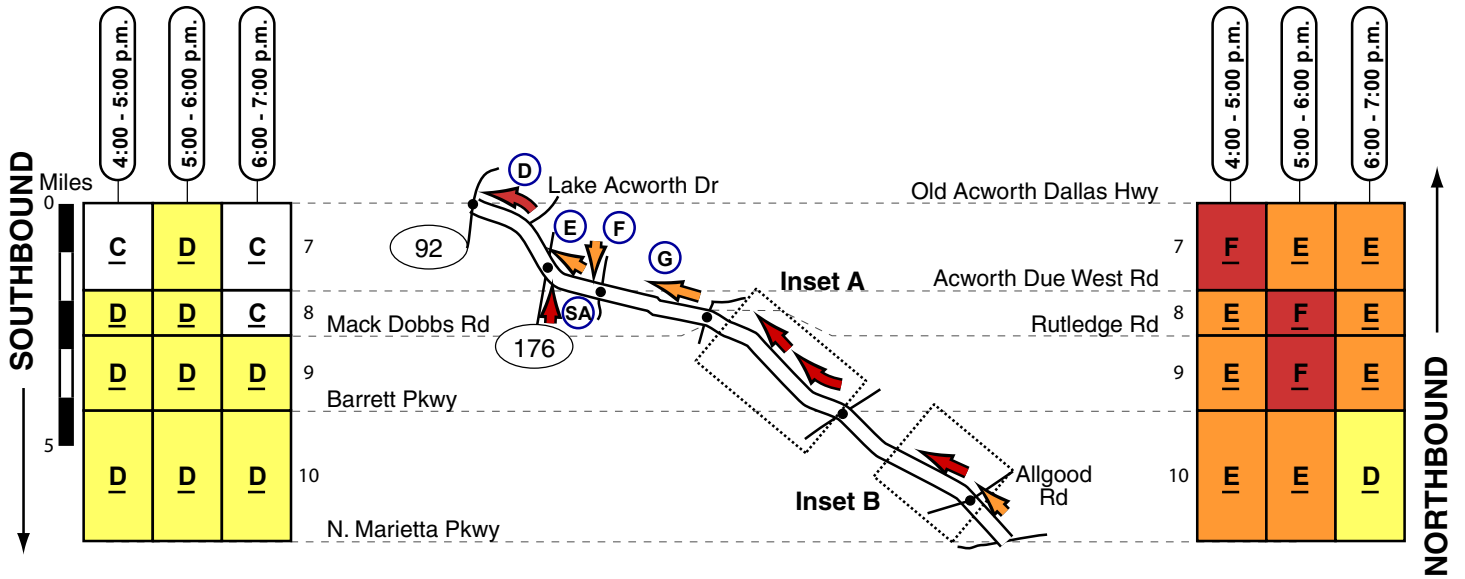
M

Congestion Type: Mainline Signal Queue
 Location: N. Marietta Pkwy
 Frequency: Intermittent
 Direction: Southbound
 Queue Population: 20 to 40 vpl
 Number of Lanes: 2

SA

Congestion Type: Surveyed Cross Road Signal Queue
 Location: SR 176
 Frequency: Intermittent
 Direction: Northbound
 Queue Population: 20 to 40 vpl
 Number of Lanes: 1

Spring 2010

SR 3/US 41 (Cobb County) - Evening

Arterial LOS Legend

| | | | | | |
|------------|----------|----------|----------|-----------|----------|
| A | B | C | D | E | F |
| Very Light | Light | Moderate | Heavy | Congested | Severe |

Spring 2010

SR 3/US 41 (Cobb County) - Evening

PERFORMANCE RATINGS

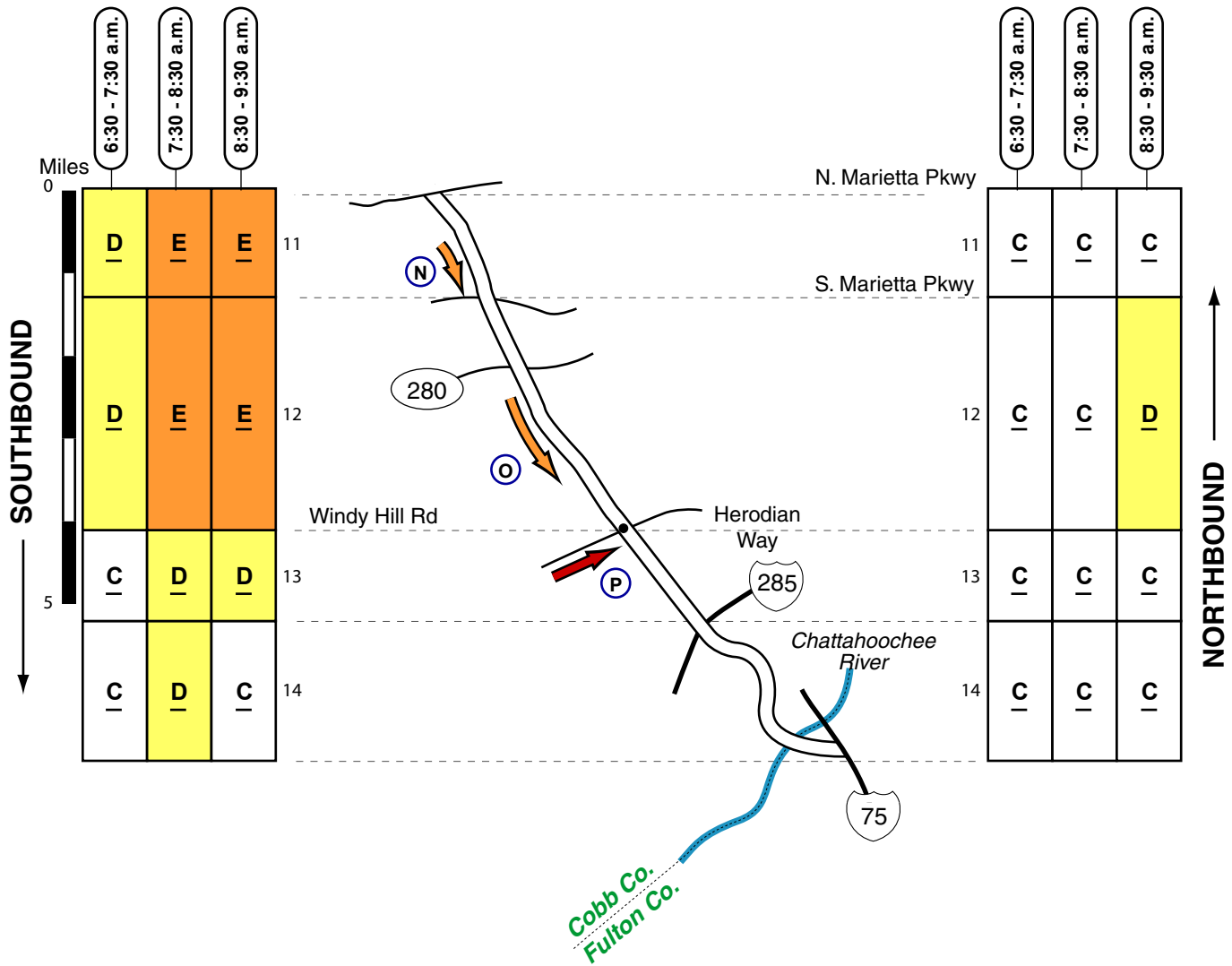
13

| | | |
|---|--|--|
| <p>D Congestion Type: Left-Turn Queue Location: SR 92 Frequency: Most Observations Direction: Northbound Queue Population: 20 to 40 vpl Number of Lanes: 1</p> | <p>K Congestion Type: Cross Road Signal Queue Location: McCollum Pkwy Frequency: Intermittent Direction: Southbound Queue Population: 20 to 30 vpl Number of Lanes: 2</p> | <p>R Congestion Type: Mainline Signal Queue Location: Bells Ferry Rd Frequency: Intermittent Direction: Northbound Queue Population: 20 to 40 vpl Number of Lanes: 2</p> |
| <p>E Congestion Type: Left-Turn Queue Location: SR 176 (Mars Hill Rd) Frequency: Intermittent Direction: Northbound Queue Population: 20 to 30 vpl Number of Lanes: 1</p> | <p>L Congestion Type: Mainline Signal Queue Location: McCollum Pkwy Frequency: Peak Hour Direction: Northbound Queue Population: 20 to 40 vpl Number of Lanes: 2</p> | <p>S Congestion Type: Cross Road Signal Queue Location: Bells Ferry Rd Frequency: Intermittent Direction: Northbound Queue Population: 20 to 40 vpl Number of Lanes: 1</p> |
| <p>F Congestion Type: Cross Road Signal Queue Location: Acworth Due West Rd Frequency: Intermittent Direction: Southbound Queue Population: 20 to 35 vpl Number of Lanes: 1</p> | <p>M Congestion Type: Mainline Signal Queue Location: Ellison Lakes Dr Frequency: Peak Hour Direction: Northbound Queue Population: 20 to 40 vpl Number of Lanes: 2</p> | <p>T Congestion Type: Mainline Signal Queue Location: Kennestone Circle Frequency: Most Observations Direction: Northbound Queue Population: 20 to 50 vpl Number of Lanes: 2 Note: During some observations, congestion extended back through the upstream signal at Canton Rd Connector.</p> |
| <p>G Congestion Type: Platoons Location: Between Rutledge Rd & Acworth Due West Rd Frequency: Intermittent Direction: Northbound Platoon Population: 25 to 35 vpl Number of Lanes: 2</p> | <p>N Congestion Type: Cross Road Signal Queue Location: Old Hwy 41 Frequency: Intermittent Direction: Southbound Queue Population: 20 to 30 vpl Number of Lanes: 1</p> | <p>U Congestion Type: Cross Road Signal Queue Location: Allgood Rd Frequency: Intermittent Direction: Westbound Queue Population: 20 to 30 vpl Number of Lanes: 2</p> |
| <p>H Congestion Type: Mainline Signal Queue Location: Watts Dr Frequency: Intermittent Direction: Northbound Queue Population: 20 to 30 vpl Number of Lanes: 2</p> | <p>O Congestion Type: Mainline Signal Queue Location: Old Hwy 41 Frequency: Peak Hour Direction: Northbound Queue Population: 20 to 50 vpl Number of Lanes: 2</p> | <p>V Congestion Type: Mainline Signal Queue Location: Allgood Rd Frequency: Intermittent Direction: Northbound Queue Population: 20 to 30 vpl Number of Lanes: 2</p> |
| <p>I Congestion Type: Cross Road Signal Queue Location: Kennesaw Due West Rd Frequency: Intermittent Direction: Southbound Queue Population: 20 to 25 vpl Number of Lanes: 1</p> | <p>P Congestion Type: Mainline Signal Queue Location: Barrett Pkwy Frequency: Intermittent Direction: Northbound Queue Population: 20 to 40 vpl Number of Lanes: 2</p> | <p>SA Congestion Type: Surveyed Cross Road Signal Queue Location: SR 176 Frequency: Peak Hour Direction: Northbound Queue Population: 20 to 50 vpl Number of Lanes: 1 Note: During one observation, approximately 100 vehicles were queued at the signal.</p> |
| <p>J Congestion Type: Mainline Signal Queue Location: Kennesaw Due West Rd Frequency: Intermittent Direction: Northbound Queue Population: 20 to 40 vpl Number of Lanes: 2</p> | <p>Q Congestion Type: Mainline Signal Queue Location: Progressive Way Frequency: Intermittent Direction: Northbound Queue Population: 20 to 30 vpl Number of Lanes: 2</p> | |

Arterial LOS Legend

| A | B | C | D | E | F |
|------------|-------|----------|-------|-----------|--------|
| Very Light | Light | Moderate | Heavy | Congested | Severe |

SR 3/US 41 (Cobb County) - Morning



N

Congestion Type: Platoons
Location: Between N. Marietta Pkwy & S. Marietta Pkwy
Frequency: Intermittent
Direction: Southbound
Platoon Population: 25 to 35 vpl
Number of Lanes: 2

P

Congestion Type: Cross Road Signal Queue
Location: Windy Hill Rd
Frequency: Most Observations
Direction: Eastbound
Queue Population: 20 to 60 vpl
Number of Lanes: 2

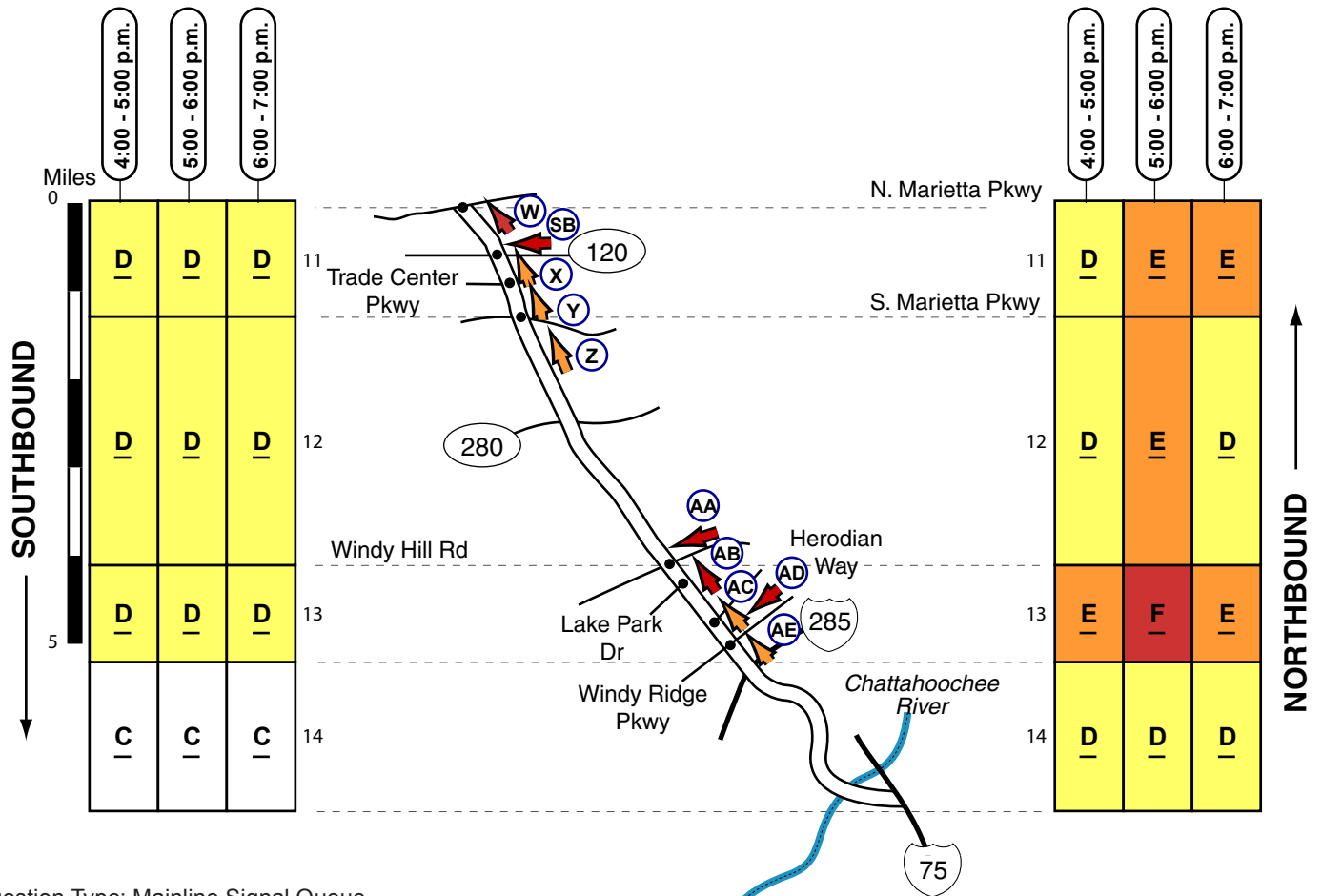
O

Congestion Type: Platoons
Location: Between S. Marietta Pkwy & Windy Hill Rd
Frequency: Most Observations
Direction: Southbound
Platoon Population: 25 to 35 vpl
Number of Lanes: 2

Arterial LOS Legend

| A | B | C | D | E | F |
|------------|-------|----------|-------|-----------|--------|
| Very Light | Light | Moderate | Heavy | Congested | Severe |

SR 3/US 41 (Cobb County) - Evening



W
 Congestion Type: Mainline Signal Queue
 Location: Marietta Pkwy (120 Loop)
 Frequency: Most Observations
 Direction: Northbound
 Queue Population: 20 to 60 vpl
 Number of Lanes: 2

X
 Congestion Type: Mainline Signal Queue
 Location: SR 120 (Roswell Rd)
 Frequency: Intermittent
 Direction: Northbound
 Queue Population: 20 to 35 vpl
 Number of Lanes: 2

Y
 Congestion Type: Mainline Signal Queue
 Location: Trade Center Pkwy
 Frequency: Intermittent
 Direction: Northbound
 Queue Population: 20 to 25 vpl
 Number of Lanes: 2

Z
 Congestion Type: Mainline Signal Queue
 Location: S. Marietta Pkwy
 Frequency: Intermittent
 Direction: Northbound
 Queue Population: 20 to 30 vpl
 Number of Lanes: 2

AA
 Congestion Type: Cross Road Signal Queue
 Location: Windy Hill Rd
 Frequency: Most observations
 Direction: Westbound
 Queue Population: 20 to 30 vpl
 Number of Lanes: 2

AB
 Congestion Type: Mainline Signal Queue
 Location: Windy Hill Rd
 Frequency: Most Observations
 Direction: Northbound
 Queue Population: 20 to 60 vpl
 Number of Lanes: 2

AC
 Congestion Type: Mainline Signal Queue
 Location: Herodian Way
 Frequency: Intermittent
 Direction: Northbound
 Queue Population: 20 to 25 vpl
 Number of Lanes: 2

AD
 Congestion Type: Cross Road Signal Queue
 Location: Windy Ridge Pkwy
 Frequency: Peak Hour
 Direction: Westbound
 Queue Population: 20 to 60 vpl
 Number of Lanes: 2

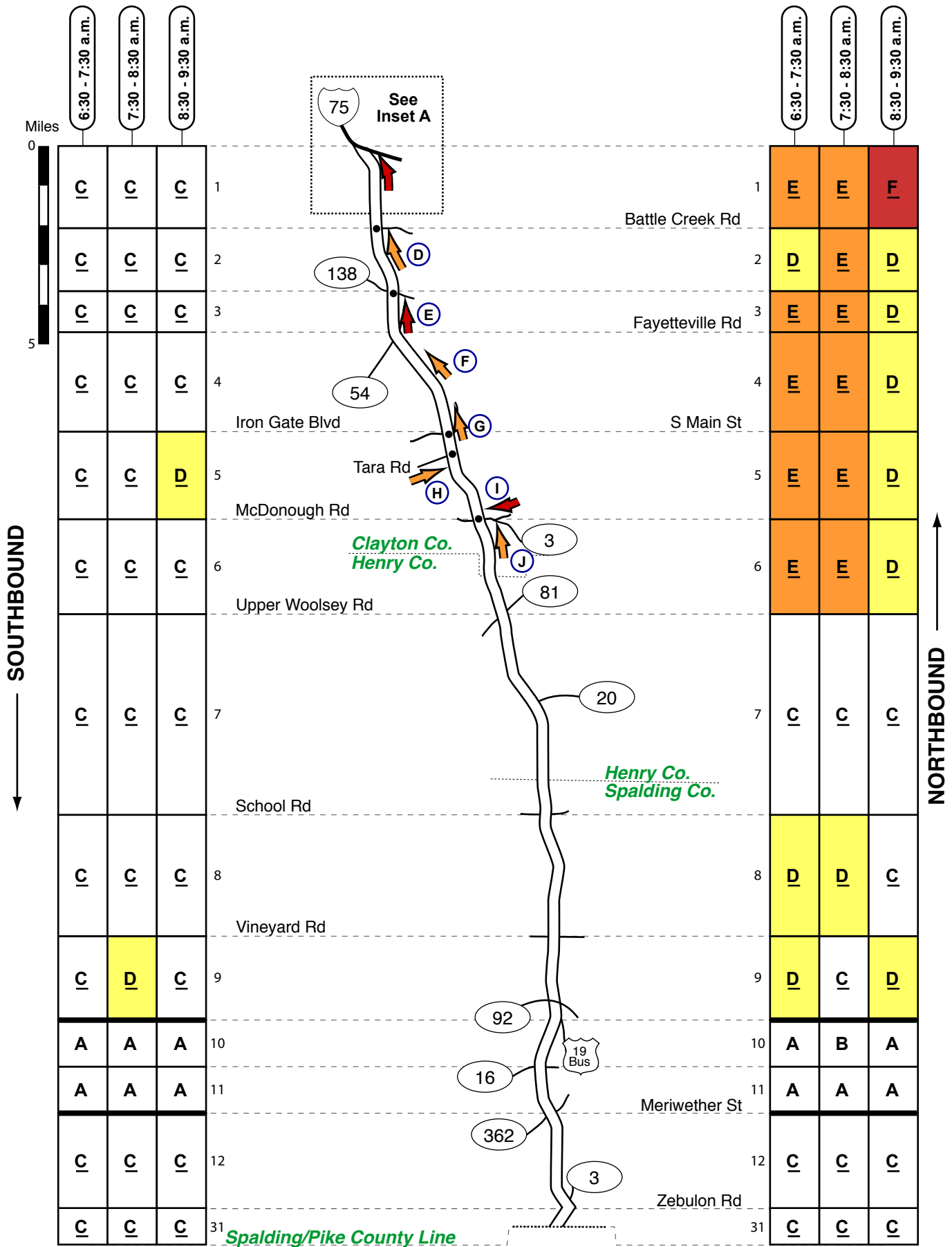
AE
 Congestion Type: Mainline Signal Queue
 Location: Windy Ridge Pkwy
 Frequency: Intermittent
 Direction: Northbound
 Queue Population: 20 to 35 vpl
 Number of Lanes: 3

SB
 Congestion Type: Surveyed Cross Road Signal Queue
 Location: SR 120
 Frequency: Intermittent
 Direction: Westbound
 Queue Population: 20 to 30 vpl
 Number of Lanes: 1

Arterial LOS Legend

| A | B | C | D | E | F |
|------------|-------|----------|-------|-----------|--------|
| Very Light | Light | Moderate | Heavy | Congested | Severe |

SR 3/US 19/41 (Clayton/Henry & Spalding Counties) - Morning



SR 3/US 19/41 (Clayton/Henry & Spalding Counties) - Morning

A

Congestion Type: Mainline Signal Queue
 Location: Upper Riverdale Rd
 Frequency: Most Observations
 Direction: Northbound
 Queue Population: 20 to 50 vpl
 Number of Lanes: 2

B

Congestion Type: Mainline Signal Queue
 Location: Old Dixie Hwy
 Frequency: Intermittent
 Direction: Northbound
 Queue Population: 20 to 40 vpl
 Number of Lanes: 2
 Note: During one observation, northbound congestion extended back through the upstream signal at Morrow Industrial Blvd.

C

Congestion Type: Mainline Signal Queue
 Location: Morrow Industrial Blvd
 Frequency: One Time Only
 Direction: Northbound
 Queue Population: 30 to 40 vpl
 Number of Lanes: 2
 Note: Downstream congestion approaching I-75 appeared to have caused or exacerbated congestion at Morrow Ind. Blvd.

D

Congestion Type: Mainline Signal Queue/Platoons
 Location: Battle Creek Rd
 Frequency: Intermittent
 Direction: Northbound
 Queue Population: 20 to 35 vpl
 Number of Lanes: 2

E

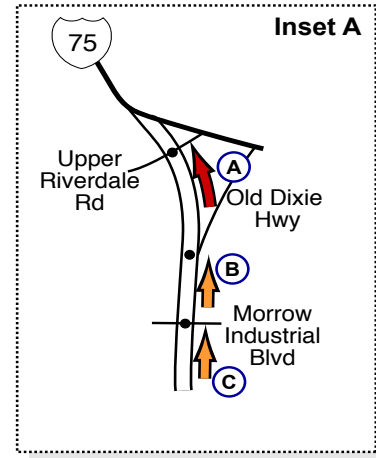
Congestion Type: Mainline Signal Queue
 Location: SR 138
 Frequency: Peak Hour
 Direction: Northbound
 Queue Population: 20 to 40 vpl
 Number of Lanes: 3

F

Congestion Type: Platoons
 Location: Between Mundy's Mill Rd and SR 54
 Frequency: Intermittent
 Direction: Northbound
 Platoon Population: 25 to 40 vpl
 Number of Lanes: 2

G

Congestion Type: Platoons
 Location: Vicinity of Iron Gate Blvd / S. Main St
 Frequency: Intermittent
 Direction: Northbound
 Platoon Population: 25 to 40 vpl
 Number of Lanes: 2



H

Congestion Type: Cross Road Signal Queue
 Location: Tara Rd
 Frequency: Intermittent
 Direction: Eastbound
 Queue Population: 20 to 25 vpl
 Number of Lanes: 2

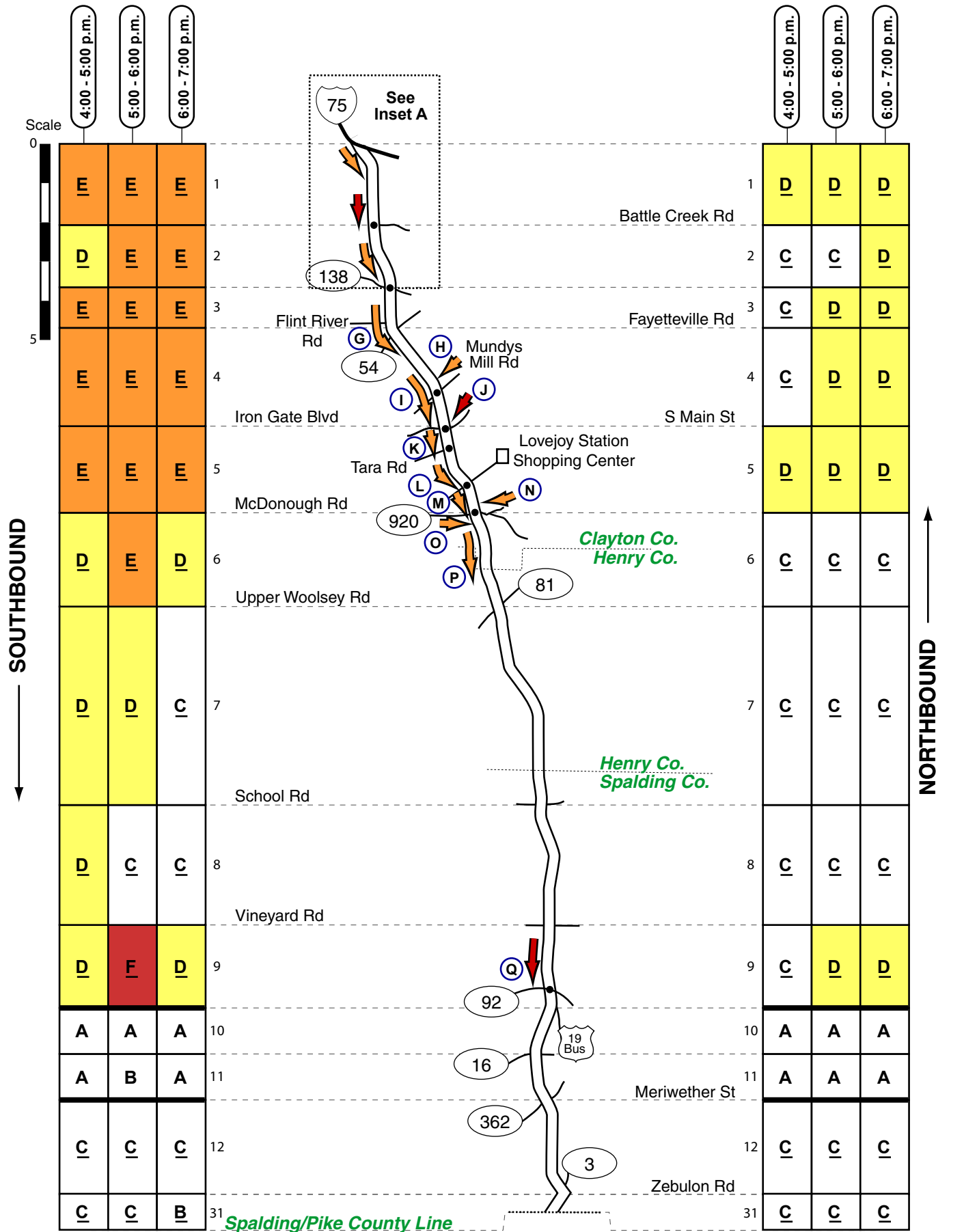
I

Congestion Type: Cross Road Signal Queue
 Location: McDonough Rd
 Frequency: Most Observations
 Direction: Westbound
 Queue Population: 20 to 45 vpl
 Number of Lanes: 1

J

Congestion Type: Mainline Signal Queue
 Location: McDonough Rd
 Frequency: Intermittent
 Direction: Northbound
 Queue Population: 20 to 55 vpl
 Number of Lanes: 2

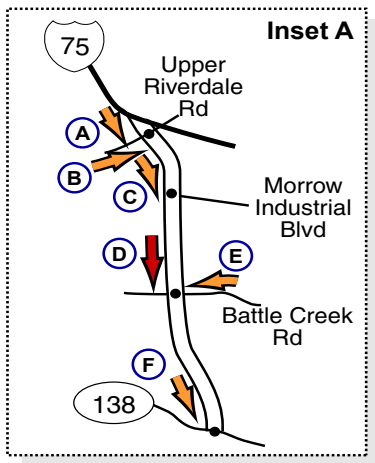
SR 3/US 19/41 (Clayton/Henry & Spalding Counties) - Evening



Arterial LOS Legend

| | | | | | |
|------------|----------|----------|----------|-----------|----------|
| A | B | C | D | E | F |
| Very Light | Light | Moderate | Heavy | Congested | Severe |

SR 3/US 19/41 (Clayton/Henry & Spalding Counties) - Evening



A
Congestion Type: Mainline Signal Queue
Location: Upper Riverdale Rd
Frequency: Intermittent
Direction: Southbound
Queue Population: 20 to 30 vpl
Number of Lanes: 3

B
Congestion Type: Cross Road Signal Queue
Location: Upper Riverdale Rd
Frequency: Intermittent
Direction: Eastbound
Queue Population: 20 to 30 vpl
Number of Lanes: 2

C
Congestion Type: Mainline Signal Queue
Location: Morrow Industrial Blvd
Frequency: Intermittent
Direction: Southbound
Queue Population: 20 to 30 vpl
Number of Lanes: 3

D
Congestion Type: Mainline Signal Queue
Location: Battle Creek Rd
Frequency: Most Observations
Direction: Southbound
Queue Population: 20 to 30 vpl
Number of Lanes: 3

E
Congestion Type: Cross Road Signal Queue
Location: Battle Creek Rd
Frequency: Intermittent
Direction: Westbound
Queue Population: 20 to 30 vpl
Number of Lanes: 1

F
Congestion Type: Platoons
Location: Between Battle Creek Rd & SR 138
Frequency: Intermittent
Direction: Southbound
Queue Population: 20 to 30 vpl
Number of Lanes: 3
Note: Intermittently, southbound congestion was found at the signal at SR 138.

G
Congestion Type: Platoons
Location: Between SR 138 & SR 54
Frequency: Intermittent
Direction: Southbound
Queue Population: 25 to 35 vpl
Number of Lanes: 3

H
Congestion Type: Cross Road Signal Queue
Location: Mundy's Mill Rd
Frequency: Intermittent
Direction: Westbound
Queue Population: 20 to 30 vpl
Number of Lanes: 1

I
Congestion Type: Platoons
Location: Between SR 54 and Main St
Frequency: Most Observations
Direction: Southbound
Platoon Population: 20 to 45 vpl
Number of Lanes: 2
Note: During one observation, southbound congestion was found approaching the signal at Mundys Mill Rd; approximately 40 vehicles per lane (two lanes) were queued at the signal.

J
Congestion Type: Cross Road Signal Queue
Location: S. Main St
Frequency: Most observations
Direction: Southbound
Queue Population: 20 to 40 vpl
Number of Lanes: 1

K
Congestion Type: Mainline Signal Queue
Location: Tara Rd
Frequency: Intermittent
Direction: Southbound
Queue Population: 20 to 40 vpl
Number of Lanes: 2

L
Congestion Type: Mainline Signal Queue
Location: Lovejoy Station Shopping Center
Frequency: Intermittent
Direction: Southbound
Queue Population: 20 to 40 vpl
Number of Lanes: 2
Note: A new traffic signal was constructed at the entrance to the Lovejoy Station Shopping Center between the surveys in 2008 and 2010.

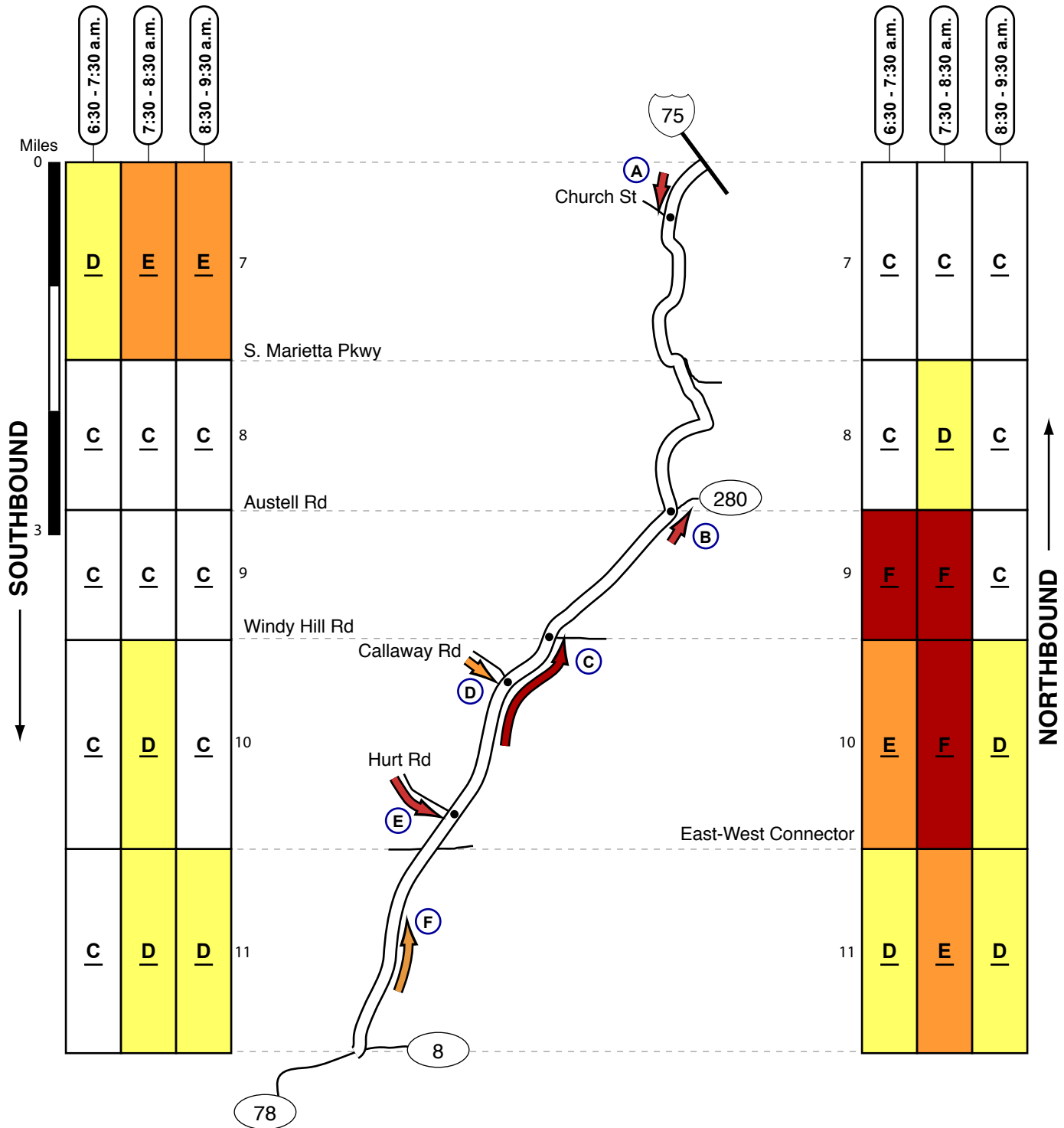
M
Congestion Type: Mainline Signal Queue
Location: McDonough Rd
Frequency: Intermittent
Direction: Southbound
Queue Population: 20 to 30 vpl
Number of Lanes: 2

N
Congestion Type: Cross Road Signal Queue
Location: McDonough Rd
Frequency: Intermittent
Direction: Westbound
Queue Population: 20 to 35 vpl
Number of Lanes: 1

O
Congestion Type: Cross Road Signal Queue
Location: McDonough Rd
Frequency: Intermittent
Direction: Eastbound
Queue Population: 20 to 30 vpl
Number of Lanes: 1

P
Congestion Type: Platoons
Location: Between McDonough Rd & SR 81
Frequency: Intermittent
Direction: Southbound
Platoon Population: 25 to 35 vpl
Number of Lanes: 2

Q
Congestion Type: Mainline Signal Queue
Location: SR 92 (McIntosh Rd)
Frequency: Peak Hour
Direction: Southbound
Queue Population: 30 to 50 vpl
Number of Lanes: 2

Spring/Fall 2010
SR 5 (Cobb County) - Morning

Spring/Fall 2010
SR 5 (Cobb County) - Morning

A

Congestion Type: Mainline Signal Queue
Location: Church St Extension
Frequency: Peak Hour
Direction: Southbound
Queue Population: 20 to 50 vpl
Number of Lanes: 2

B

Congestion Type: Mainline Signal Queue
Location: SR 280 (Cobb Dr)
Frequency: Most observations before 8:30 a.m.
Direction: Northbound
Queue Population: 30 to 50 vpl
Number of Lanes: 2
Note: The head of the queue was found in the two left-turn lanes at the signal.

C

Congestion Type: Mainline Signal Queue
Location: Windy Hill Rd
Frequency: Peak Hour
Direction: Northbound
Queue Population: 40 to 150 vpl
Number of Lanes: 2
Note: On two of four days, congestion backed through the upstream signals at Hicks Rd and Callaway Rd.

D

Congestion Type: Cross Road Signal Queue
Location: Callaway Rd
Frequency: Intermittent
Direction: Eastbound
Queue Population: 20 to 40 vpl
Number of Lanes: 1
Note: The head of the queue was found in the left-turn lane at the signal.

E

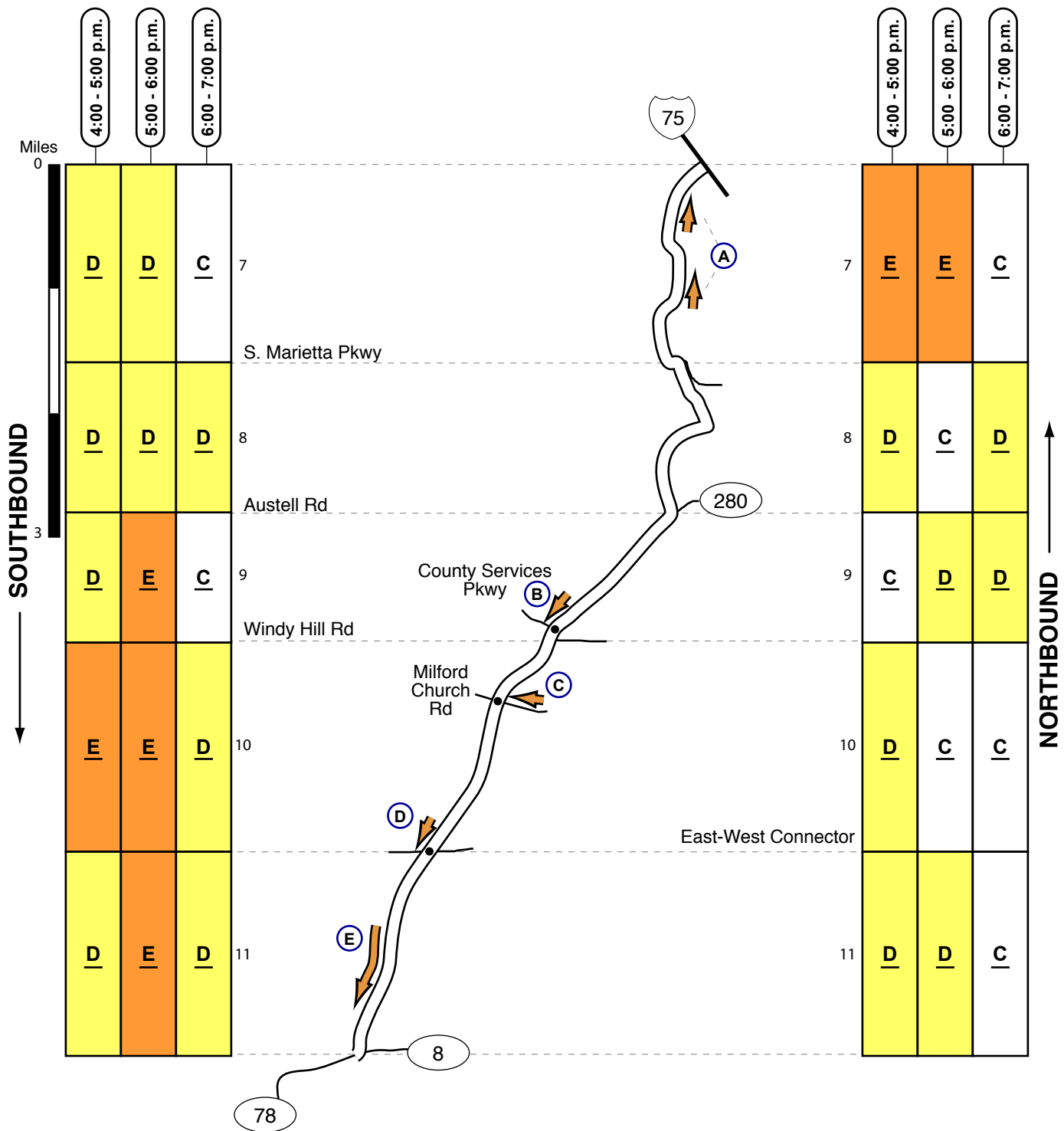
Congestion Type: Cross Road Signal Queue
Location: Hurt Rd
Frequency: Peak Hour
Direction: Eastbound
Queue Population: 20 to 40 vpl
Number of Lanes: 1

F

Congestion Type: Platoons
Location: Between SR 8 and the East-West Connector
Frequency: Intermittent
Direction: Northbound
Platoon Population: 25 to 35 vpl
Number of Lanes: 2

Arterial LOS Legend

| <u>A</u> | <u>B</u> | <u>C</u> | <u>D</u> | <u>E</u> | <u>F</u> |
|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|
| Very Light | Light | Moderate | Heavy | Congested | Severe |

Spring/Fall 2010
SR 5 (Cobb County) - Evening

Arterial LOS Legend

| A | B | C | D | E | F |
|------------|-------|----------|-------|-----------|--------|
| Very Light | Light | Moderate | Heavy | Congested | Severe |

Spring/Fall 2010

SR 5 (Cobb County) - Evening

A

Congestion Type: Platoons
Location: Between South Marietta Parkway & I-75
Frequency: Intermittent
Direction: Northbound
Platoon Population: 25 to 35 vpl
Number of Lanes: 2

B

Congestion Type: Mainline Signal Queue
Location: County Services Parkway
Frequency: Intermittent
Direction: Southbound
Queue Population: 20 to 40 vpl
Number of Lanes: 2

C

Congestion Type: Cross Road Signal Queue
Location: Milford Church Rd
Frequency: Intermittent
Direction: Westbound
Queue Population: 30 to 40 vpl
Number of Lanes: 1

D

Congestion Type: Mainline Signal Queue
Location: East-West Connector
Frequency: Intermittent
Direction: Southbound
Queue Population: 20 to 40 vpl
Number of Lanes: 2

E

Congestion Type: Platoons
Location: Between the East-West Connector and SR 8
Frequency: Intermittent
Direction: Southbound
Platoon Population: 30 to 40 vpl
Number of Lanes: 2

Arterial LOS Legend

| <u>A</u> | <u>B</u> | <u>C</u> | <u>D</u> | <u>E</u> | <u>F</u> |
|------------|----------|----------|----------|-----------|----------|
| Very Light | Light | Moderate | Heavy | Congested | Severe |

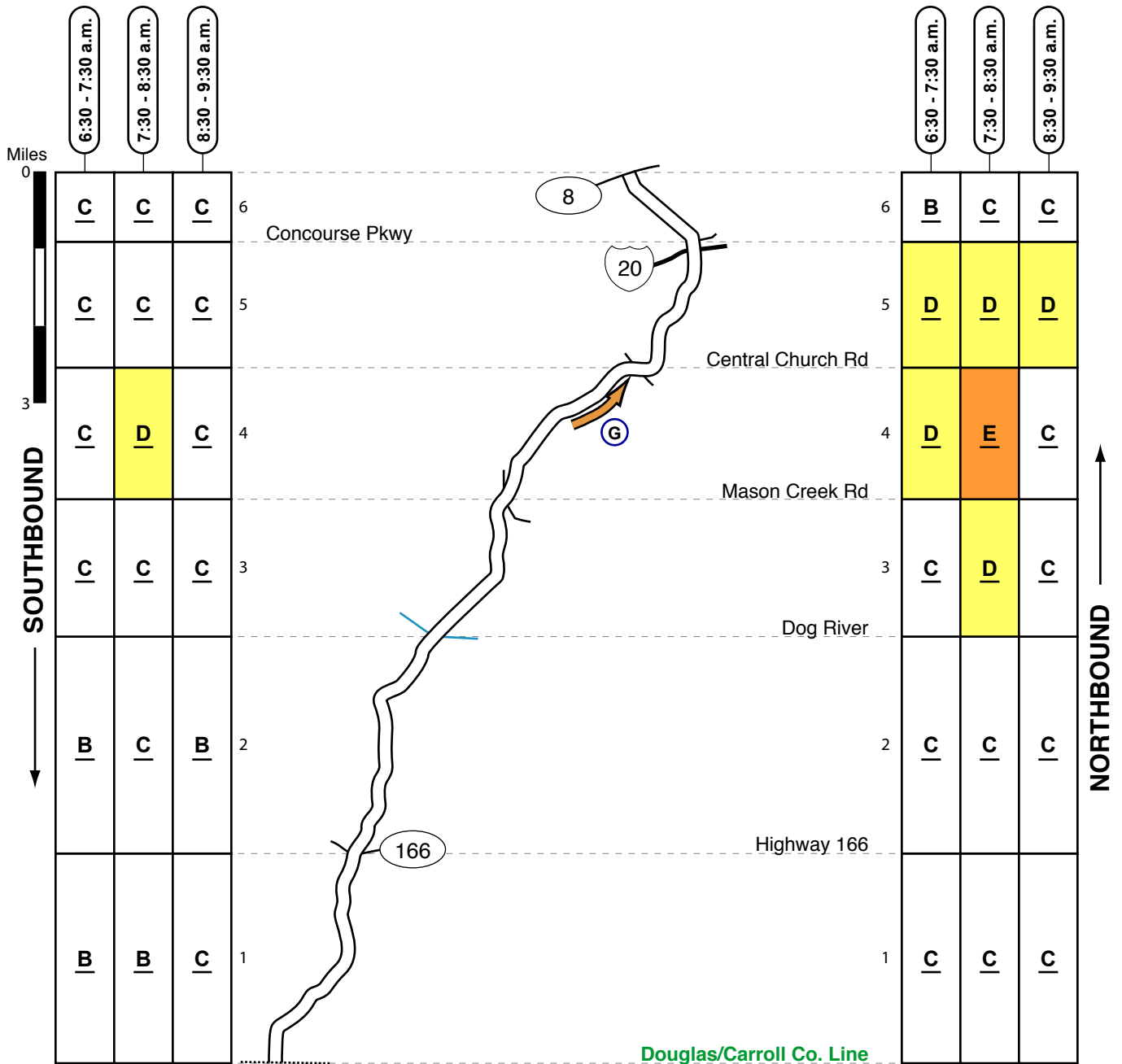
(Blank)

Spring/Fall 2010

SR 5 (Douglas County) - Morning

PERFORMANCE RATINGS

25



G

Congestion Type: Platoons

Location: Between Mason Creek Rd & Central Church Rd

Frequency: Intermittent

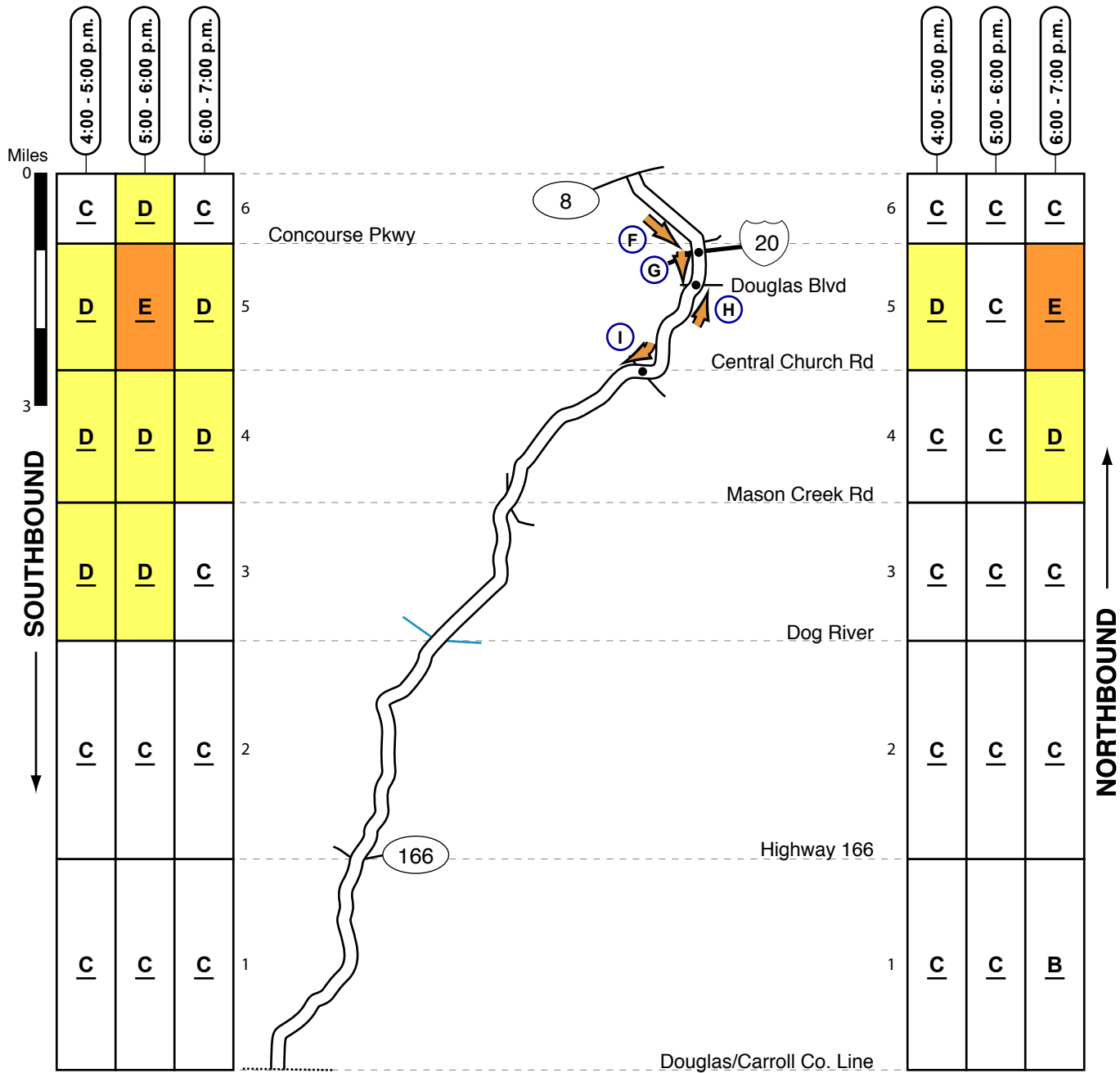
Direction: Northbound

Queue Population: 25 to 30 vpl

Number of Lanes: 1

Note: During one observation, northbound congestion was found approaching the signal at Central Church Rd; approximately 30 vehicles were queued at the signal (one lane).

SR 5 (Douglas County) - Evening



Arterial LOS Legend

| A | B | C | D | E | F |
|------------|-------|----------|-------|-----------|--------|
| Very Light | Light | Moderate | Heavy | Congested | Severe |

Spring/Fall 2010

SR 5 (Douglas County) - Evening

F

Congestion Type: Mainline Signal Queue
Location: I-20
Frequency: Intermittent
Direction: Southbound
Queue Population: 20 to 30 vpl
Number of Lanes: 2

G

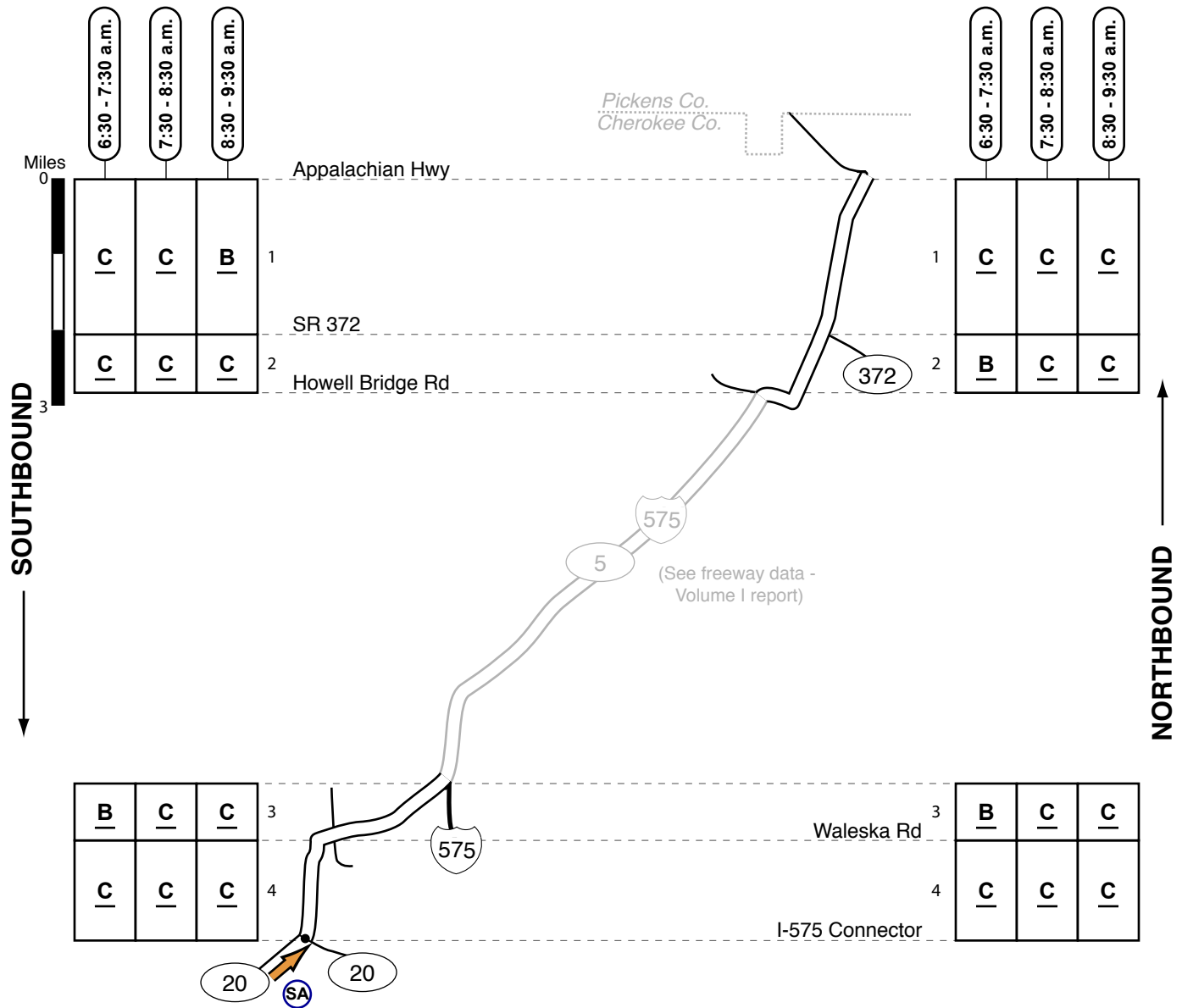
Congestion Type: Mainline Signal Queue
Location: Douglas Blvd
Frequency: Intermittent
Direction: Southbound
Queue Population: 20 to 25 vpl
Number of Lanes: 2

H

Congestion Type: Mainline Signal Queue/Platoons
Location: Douglas Blvd
Frequency: Intermittent
Direction: Northbound
Queue Population: 20 to 30 vpl
Number of Lanes: 2

I

Congestion Type: Mainline Signal Queue
Location: Central Church Rd
Frequency: Intermittent
Direction: Southbound
Queue Population: 20 to 30 vpl
Number of Lanes: 1

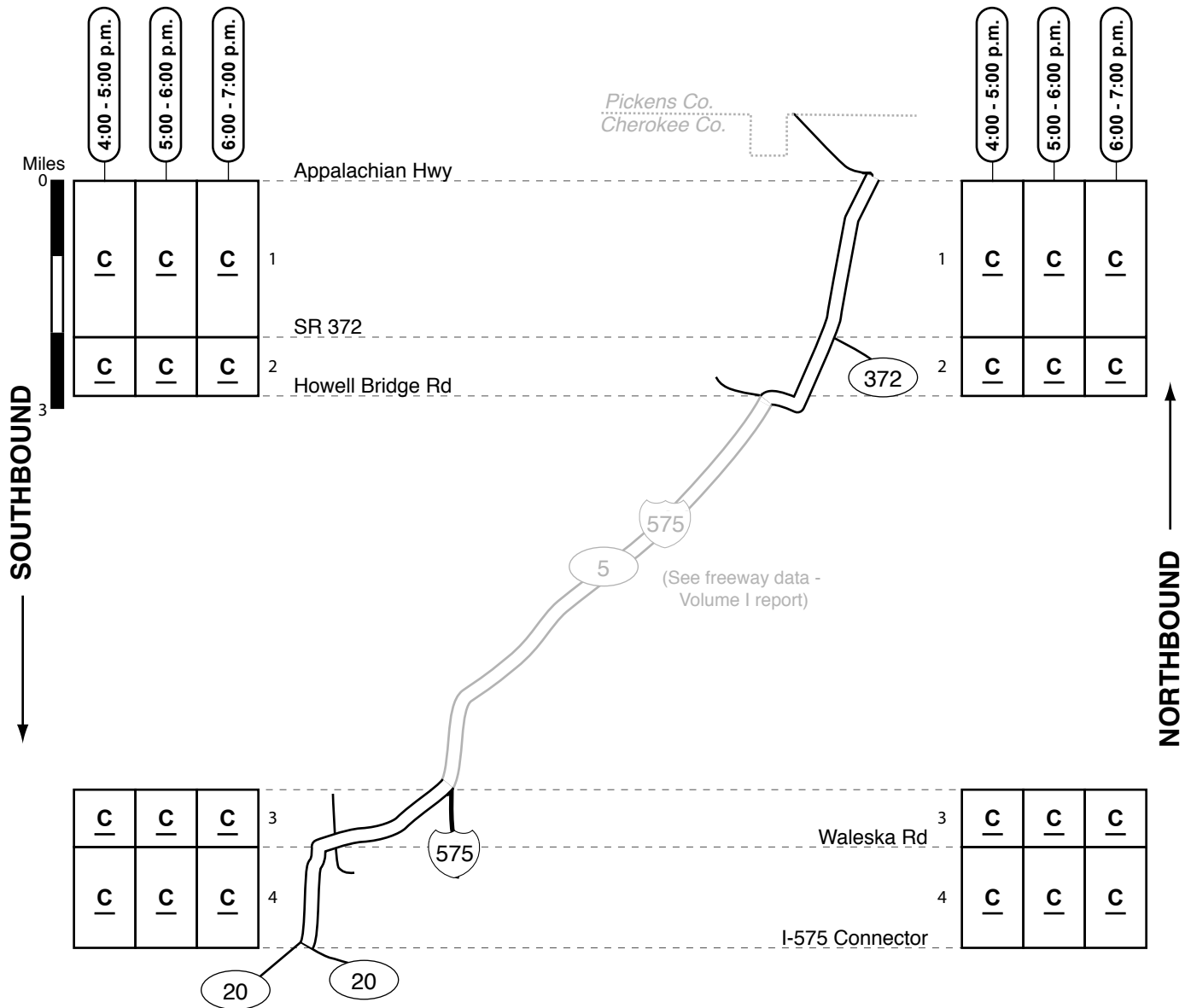
SR 5BU/Ball Ground Highway (Cherokee County) - Morning

SA
 Congestion Type: Surveyed Cross Road Signal Queue
 Location: SR 20
 Frequency: One time only
 Direction: Eastbound
 Queue Population: 40 to 45 vpl
 Number of Lanes: 1

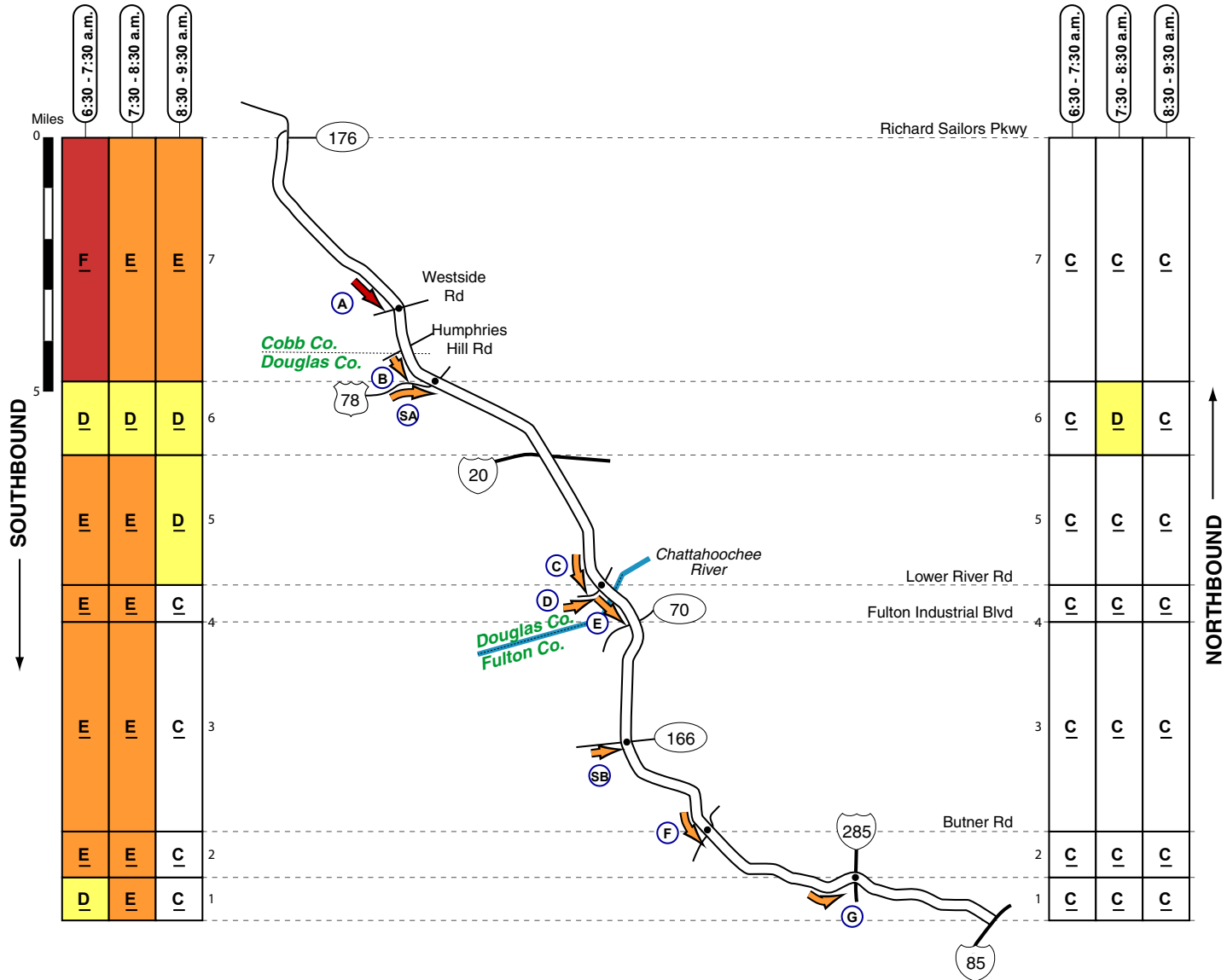
Arterial LOS Legend

| A | B | C | D | E | F |
|------------|-------|----------|-------|-----------|--------|
| Very Light | Light | Moderate | Heavy | Congested | Severe |

SR 5BU/Ball Ground Highway (Cherokee County) - Evening



SR 6 (Cobb/Douglas & Fulton Counties) - Morning



SR 6 (Cobb/Douglas & Fulton Counties) - Morning

A

Congestion Type: Mainline Signal Queue
Location: Westside Rd
Frequency: Peak Hour
Direction: Southbound
Queue Population: 20 to 55 vpl
Number of Lanes: 2

B

Congestion Type: Mainline Signal Queue
Location: US 78
Frequency: Intermittent
Direction: Southbound
Queue Population: 20 to 50 vpl
Number of Lanes: 2

C

Congestion Type: Mainline Signal Queue
Location: Lower River Rd
Frequency: Intermittent
Direction: Southbound
Queue Population: 20 to 40 vpl
Number of Lanes: 2

D

Congestion Type: Cross Road Signal Queue
Location: Lower River Rd
Frequency: Intermittent
Direction: Eastbound
Queue Population: 20 to 25 vpl
Number of Lanes: 1

E

Congestion Type: Platoons
Location: Between Lower River Rd & SR 70
Frequency: Intermittent
Direction: Southbound
Queue Population: 25 to 35 vpl
Number of Lanes: 2
Note: During one observation, southbound congestion was found approaching the signal at SR 70; approximately 45 vehicles per lane (two lanes) were queued at the signal.

F

Congestion Type: Mainline Signal Queue/Platoons
Location: Butner Rd
Frequency: Intermittent
Direction: Southbound
Queue Population: 20 to 35 vpl
Number of Lanes: 2

G

Congestion Type: Mainline Signal Queue
Location: I-285
Frequency: Intermittent
Direction: Southbound
Queue Population: 20 to 30 vpl
Number of Lanes: 2

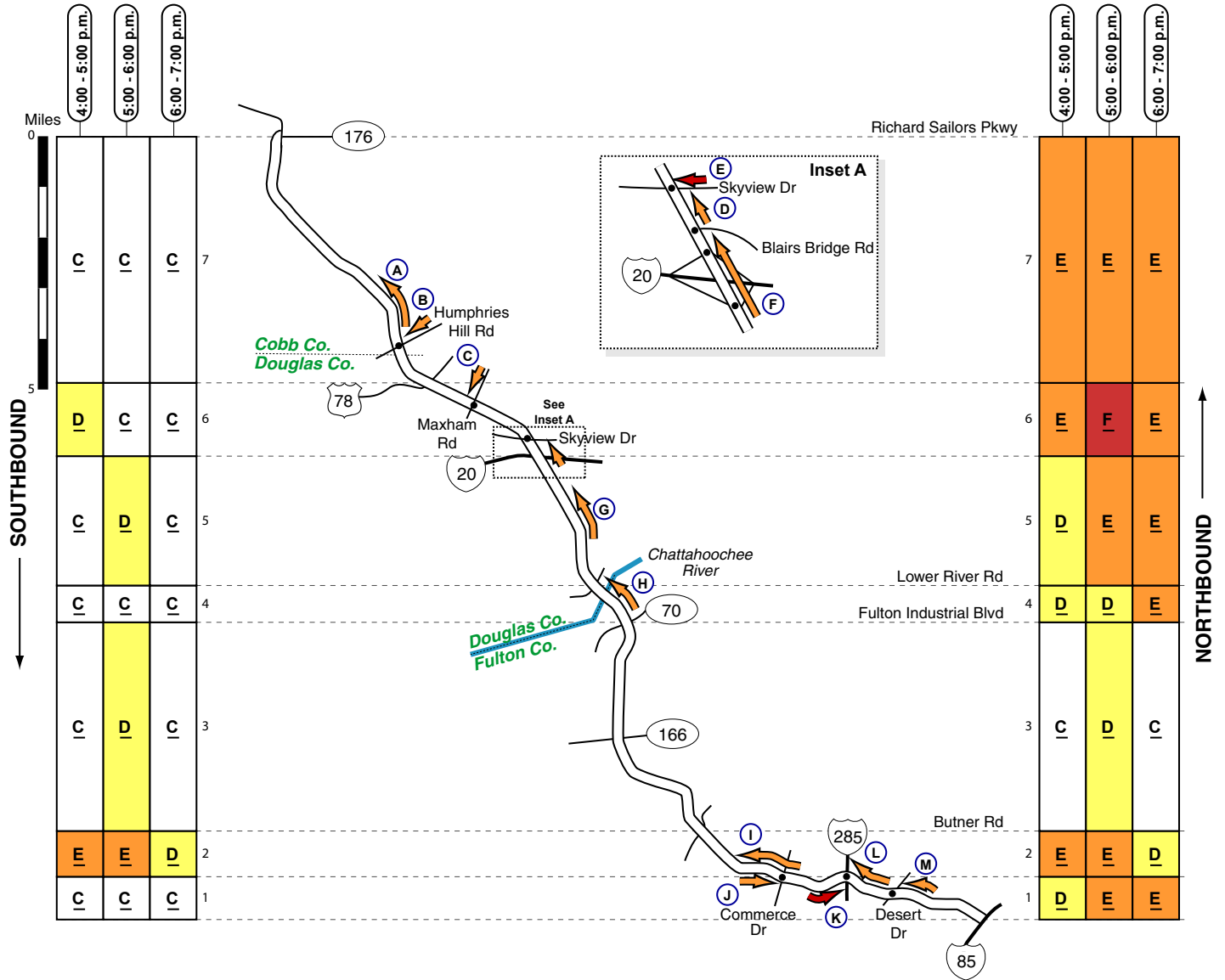
SA

Congestion Type: Surveyed Cross Road Signal Queue
Location: SR 8/US 78
Frequency: Intermittent
Direction: Eastbound
Queue Population: 20 to 25 vpl
Number of Lanes: 2

SB

Congestion Type: Surveyed Cross Road Signal Queue
Location: SR 166
Frequency: Intermittent
Direction: Eastbound
Queue Population: 20 to 30 vpl
Number of Lanes: 1

SR 6 (Cobb/Douglas & Fulton Counties) - Evening



SR 6 (Cobb/Douglas & Fulton Counties) - Evening

A

Congestion Type: Platoons
Location: Between US 78 & SR 176
Frequency: Most Observations
Direction: Northbound
Platoon Population: 25 to 35 vpl
Number of Lanes: 2

B

Congestion Type: Cross Road Signal Queue
Location: Humphries Hill Rd
Frequency: Intermittent
Direction: Westbound
Queue Population: 20 to 40 vpl
Number of Lanes: 1

C

Congestion Type: Cross Road Signal Queue
Location: Maxham Rd
Frequency: Intermittent
Direction: Southbound
Queue Population: 20 to 30 vpl
Number of Lanes: 2

D

Congestion Type: Mainline Signal Queue
Location: Skyview Dr
Frequency: Intermittent
Direction: Northbound
Queue Population: 20 to 40 vpl
Number of Lanes: 2

E

Congestion Type: Cross Road Signal Queue
Location: Skyview Dr
Frequency: Peak Hour
Direction: Westbound
Queue Population: 20 to 50 vpl
Number of Lanes: 1

F

Congestion Type: Mainline Signal Queue
Location: Blairs Bridge Rd
Frequency: Intermittent
Direction: Northbound
Queue Population: 20 to 30 vpl
Number of Lanes: 2

G

Congestion Type: Platoons
Location: Between Lower River Rd & I-20
Frequency: Intermittent
Direction: Northbound
Queue Population: 25 to 30 vpl
Number of Lanes: 2

H

Congestion Type: Platoons
Location: Between SR 70 and Lower River Rd
Frequency: Intermittent
Direction: Northbound
Queue Population: 25 to 30 vpl
Number of Lanes: 2

I

Congestion Type: Platoons
Location: Between I-285 & Butner Rd
Frequency: Intermittent
Direction: Northbound
Queue Population: 25 to 30 vpl
Number of Lanes: 2

J

Congestion Type: Mainline Signal Queue
Location: Commerce Dr
Frequency: Intermittent
Direction: Southbound
Queue Population: 20 to 30 vpl
Number of Lanes: 2

K

Congestion Type: Mainline Signal Queue
Location: I-285
Frequency: Intermittent
Direction: Southbound
Queue Population: 20 to 30 vpl
Number of Lanes: 2
Note: When congested, vehicles were queued in the left lane on SR 6 approaching the signal at the I-285 northbound entrance ramp; congestion typically extended back through the upstream signal at the I-285 southbound ramps.

L

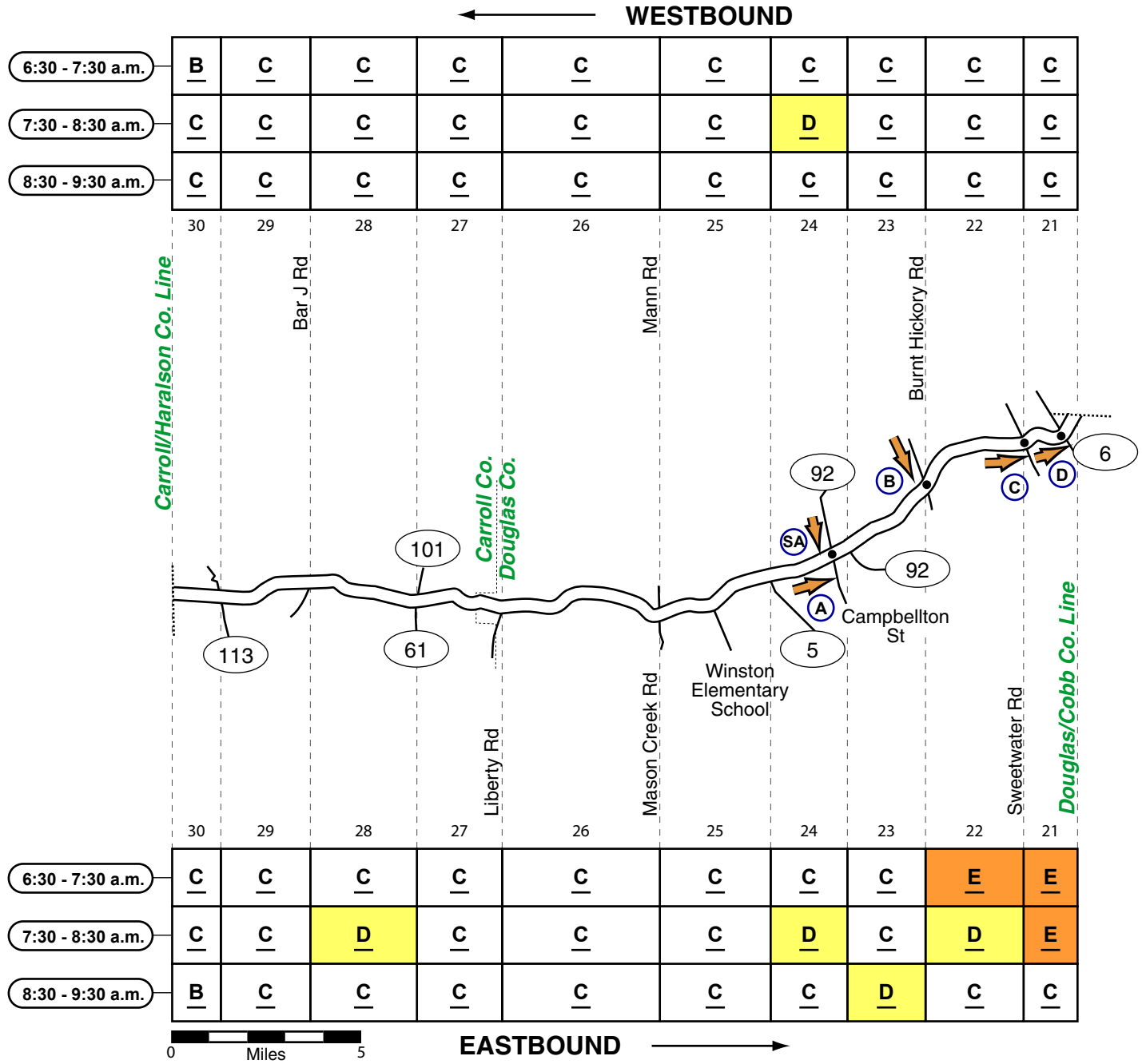
Congestion Type: Mainline Signal Queue
Location: I-285
Frequency: Intermittent
Direction: Northbound
Queue Population: 20 to 40 vpl
Number of Lanes: 2

M

Congestion Type: Mainline Signal Queue
Location: Desert Dr
Frequency: Intermittent
Direction: Northbound
Queue Population: 20 to 35 vpl
Number of Lanes: 2

Spring 2010

SR 8 (Carroll & Douglas Counties) - Morning



Arterial LOS Legend

| | | | | | |
|------------|----------|----------|----------|-----------|----------|
| <u>A</u> | <u>B</u> | <u>C</u> | <u>D</u> | <u>E</u> | <u>F</u> |
| Very Light | Light | Moderate | Heavy | Congested | Severe |

SR 8 (Carroll & Douglas Counties) - Morning

A

Congestion Type: Mainline Signal Queue
Location: Campbellton St/SR 92
Frequency: One Time Only
Direction: Eastbound
Queue Population: 25 to 30 vpl
Number of Lanes: 1

B

Congestion Type: Cross Road Signal Queue
Location: Burnt Hickory Rd
Frequency: Intermittent
Direction: Southbound
Queue Population: 20 to 25 vpl
Number of Lanes: 1

C

Congestion Type: Mainline Signal Queue
Location: Sweetwater Rd
Frequency: Intermittent
Direction: Eastbound
Queue Population: 20 to 35 vpl
Number of Lanes: 1

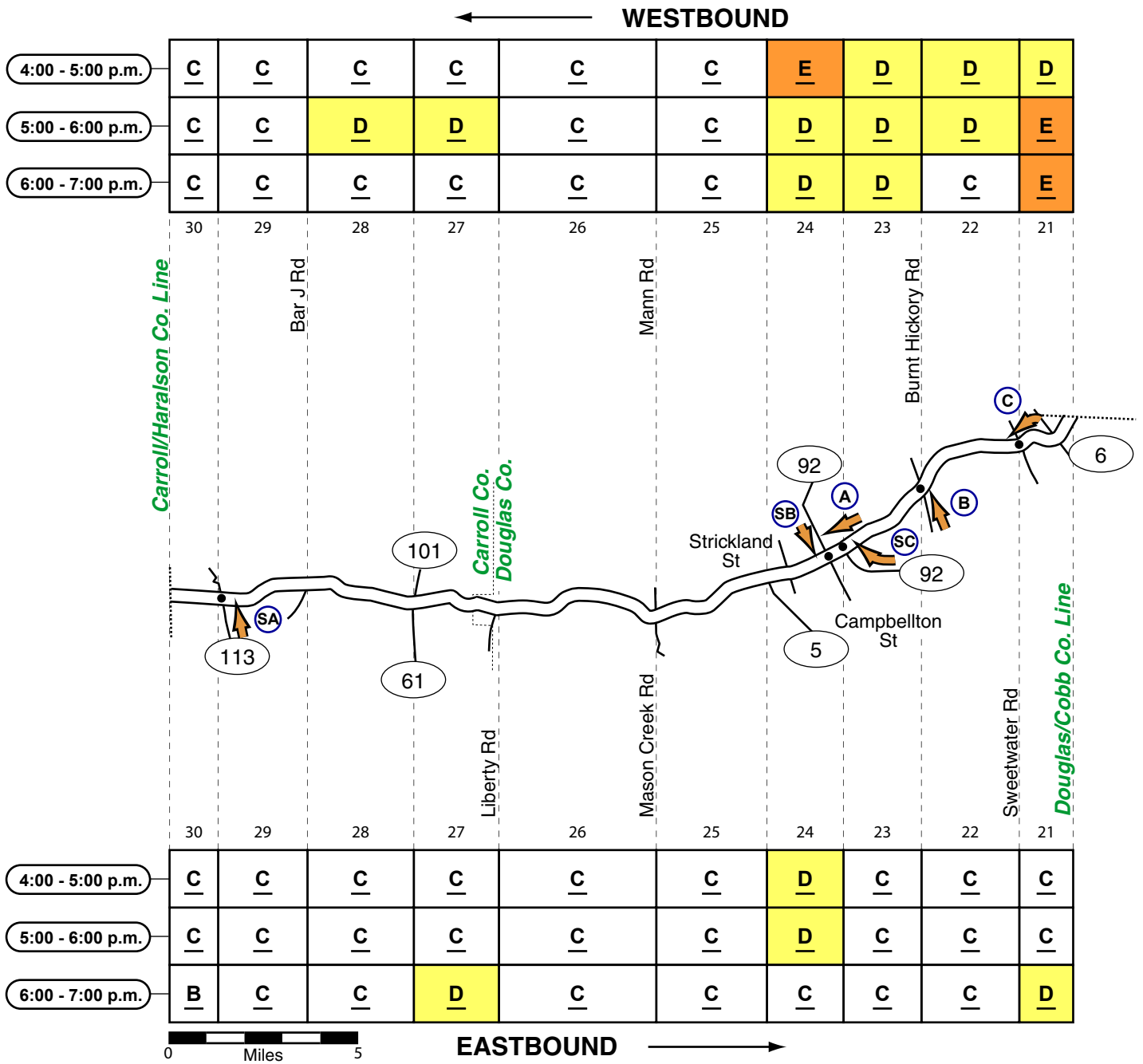
D

Congestion Type: Mainline Signal Queue
Location: SR 6
Frequency: Intermittent
Direction: Eastbound
Queue Population: 20 to 25 vpl
Number of Lanes: 2

SA

Congestion Type: Surveyed Cross Road Signal Queue
Location: SR 92
Frequency: Peak Hour
Direction: Southbound
Queue Population: 20 to 50 vpl
Number of Lanes: 1
Note: During some observations, congestion extended back through the upstream signal at Forrest Ave.

SR 8 (Carroll & Douglas Counties) - Evening



Arterial LOS Legend

| | | | | | |
|------------|----------|----------|----------|-----------|----------|
| <u>A</u> | <u>B</u> | <u>C</u> | <u>D</u> | <u>E</u> | <u>F</u> |
| Very Light | Light | Moderate | Heavy | Congested | Severe |

SR 8 (Carroll & Douglas Counties) - Evening

A

Congestion Type: Mainline Signal Queue

Location: SR 92 (Campbelton St)

Frequency: Intermittent

Direction: Westbound

Queue Population: 20 to 25 vpl

Number of Lanes: 1

B

Congestion Type: Cross Road Signal Queue

Location: Burnt Hickory Rd

Frequency: Intermittent

Direction: Northbound

Queue Population: 20 to 30 vpl

Number of Lanes: 1

C

Congestion Type: Mainline Signal Queue

Location: Sweetwater Rd

Frequency: Intermittent

Direction: Westbound

Queue Population: 20 to 30 vpl

Number of Lanes: 1

SA

Congestion Type: Surveyed Cross Road Signal Queue

Location: SR 113

Frequency: Intermittent

Direction: Northbound

Queue Population: 20 to 40 vpl

Number of Lanes: 1

SB

Congestion Type: Surveyed Cross Road Signal Queue

Location: SR 92

Frequency: Intermittent

Direction: Southbound

Queue Population: 20 to 30 vpl

Number of Lanes: 1

SC

Congestion Type: Surveyed Cross Road Signal Queue

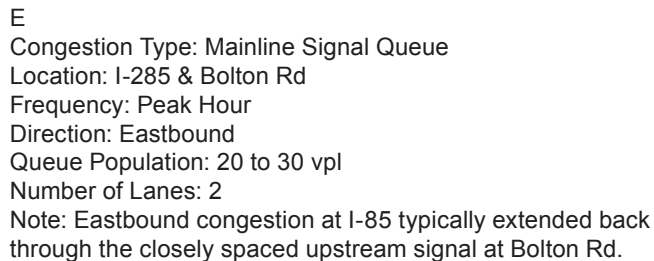
Location: SR 92

Frequency: Intermittent

Direction: Northbound

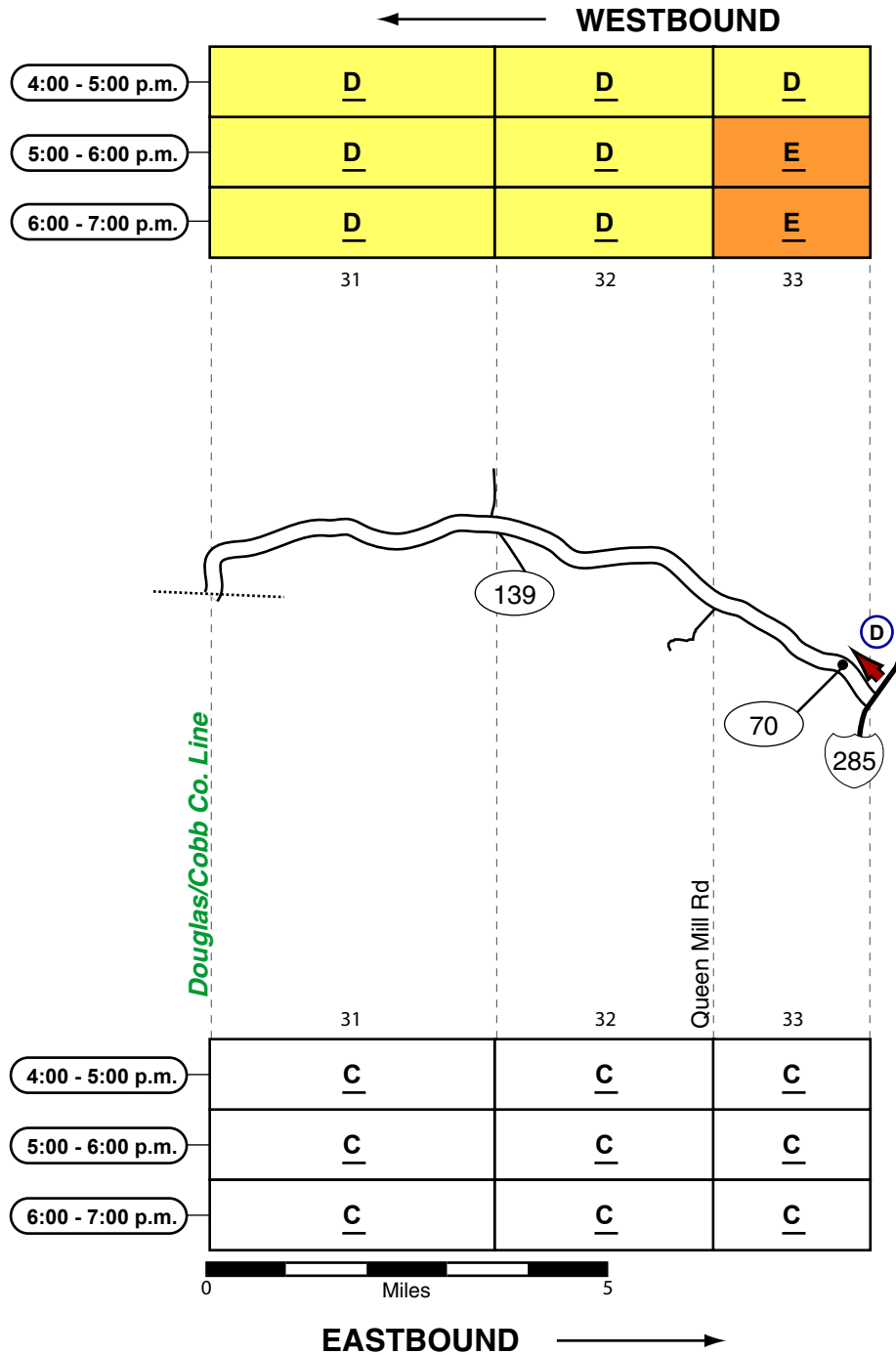
Queue Population: 20 to 30 vpl

Number of Lanes: 1



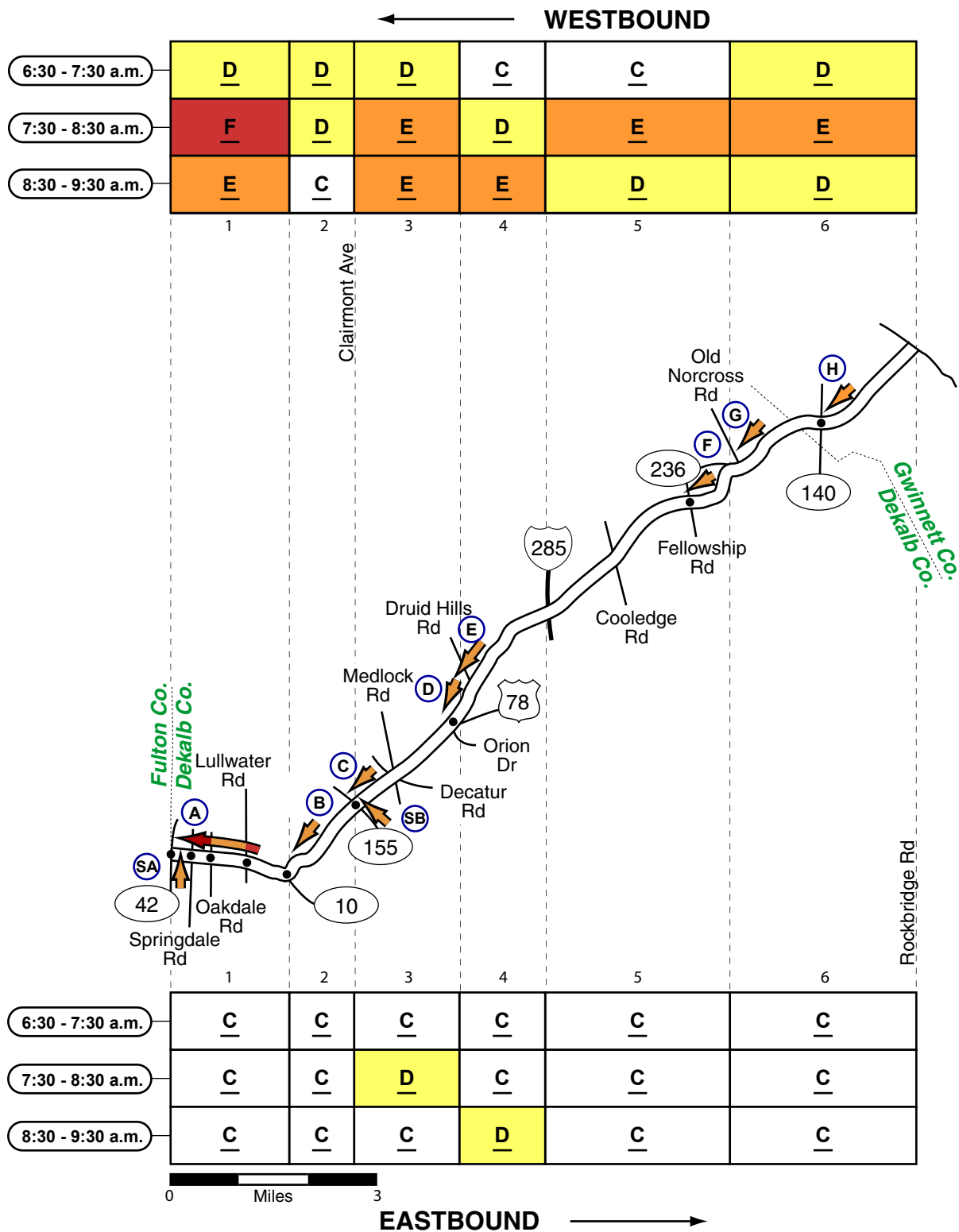
Spring/Fall 2010

SR 8 (Cobb County) - Evening



D
 Congestion Type: Mainline Signal Queue
 Location: SR 70 (Fulton Industrial Blvd)
 Frequency: Peak Hour
 Direction: Westbound
 Queue Population: 20 to 30 vpl
 Number of Lanes: 1
 Note: During the peak period, congestion was also typically found in the left-turn bay at the signal.

SR 8 (DeKalb/Gwinnett & Barrow Counties) - Morning



Arterial LOS Legend

| | | | | | |
|------------|----------|----------|----------|-----------|----------|
| <u>A</u> | <u>B</u> | <u>C</u> | <u>D</u> | <u>E</u> | <u>F</u> |
| Very Light | Light | Moderate | Heavy | Congested | Severe |

SR 8 (DeKalb/Gwinnett & Barrow Counties) - Morning**A**

Congestion Type: Mainline Signal Queues
Location: Between SR 10 & SR 42
Frequency: Most Observations
Direction: Westbound
Queue Population: 20 to 40 vpl
Number of Lanes: 2
Note: During some observations, congestion approaching SR 42 appeared to affect upstream congestion at the signals at Springdale Rd, Oakdale Rd and Lullwater Rd.

B

Congestion Type: Mainline Signal Queue
Location: SR 10
Frequency: Intermittent
Direction: Westbound
Queue Population: 20 to 25 vpl
Number of Lanes: 2

C

Congestion Type: Mainline Signal Queue
Location: SR 155
Frequency: One time only
Direction: Westbound
Queue Population: 20 to 25 vpl
Number of Lanes: 2

D

Congestion Type: Mainline Signal Queue/Platoons
Location: Orion Dr
Frequency: Intermittent
Direction: Westbound
Queue Population: 25 to 40 vpl
Number of Lanes: 2

E

Congestion Type: Platoons
Location: vicinity of Druid Hills Rd
Frequency: Most observations between 8:00 and 9:00 a.m.
Direction: Westbound
Platoon Population: 25 to 30 vpl
Number of Lanes: 2

F

Congestion Type: Mainline Signal Queue
Location: Fellowship Rd
Frequency: Intermittent
Direction: Westbound
Queue Population: 20 to 30 vpl
Number of Lanes: 2

G

Congestion Type: Platoons
Location: vicinity of Old Norcross Rd
Frequency: Intermittent
Direction: Westbound
Platoon Population: 25 to 35 vpl
Number of Lanes: 2

H

Congestion Type: Mainline Signal Queue
Location: SR 140
Frequency: Intermittent
Direction: Westbound
Queue Population: 20 to 30 vpl
Number of Lanes: 2

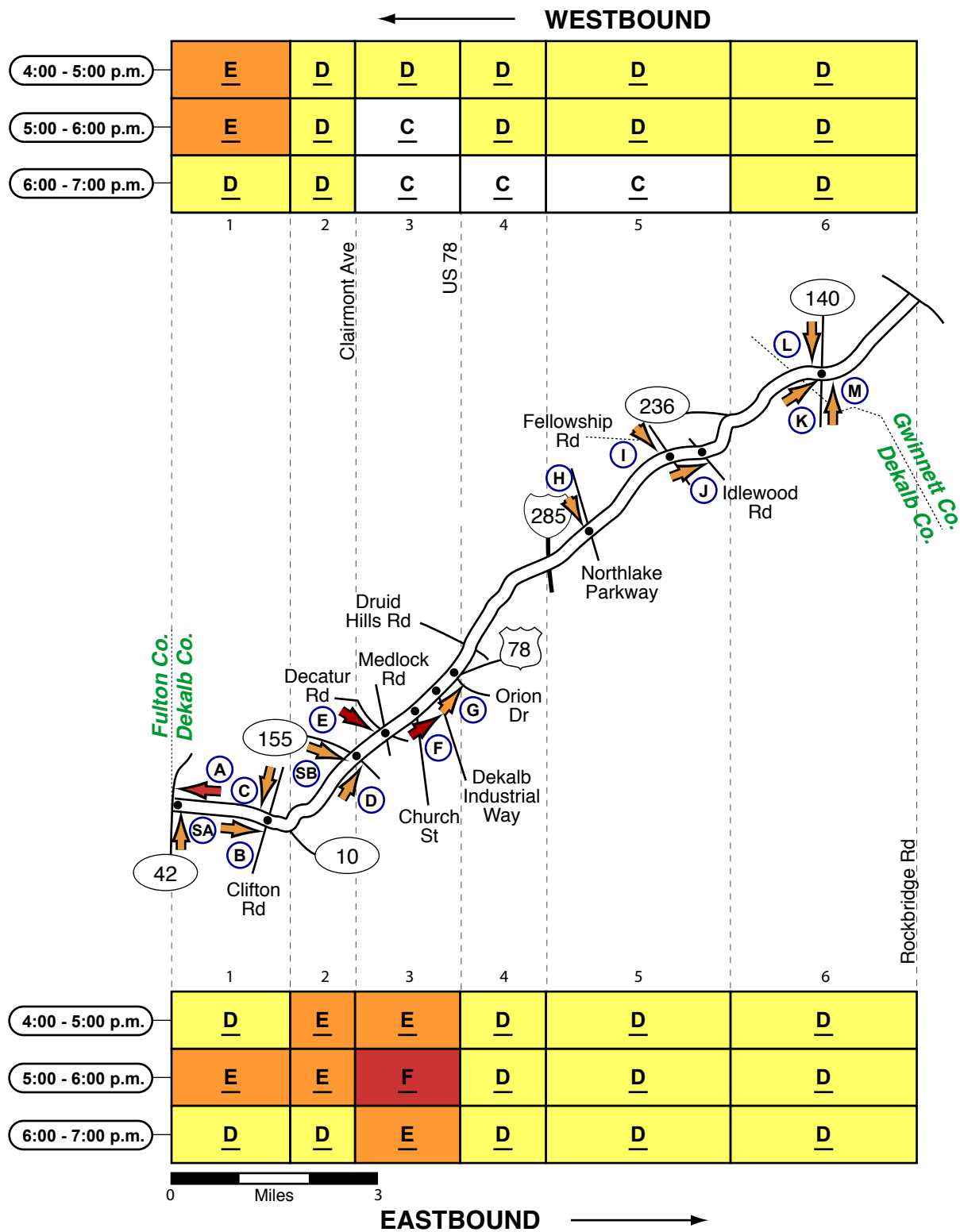
SA

Congestion Type: Surveyed Cross Road Signal Queue
Location: SR 42
Frequency: Intermittent
Direction: Northbound
Queue Population: 20 to 30 vpl
Number of Lanes: 2

SB

Congestion Type: Surveyed Cross Road Signal Queue
Location: SR 155
Frequency: Intermittent
Direction: Southbound Queue
Population: 20 to 30 vpl
Number of Lanes: 2

SR 8 (DeKalb/Gwinnett & Barrow Counties) - Evening



Arterial LOS Legend

| | | | | | |
|------------|----------|----------|----------|-----------|----------|
| <u>A</u> | <u>B</u> | <u>C</u> | <u>D</u> | <u>E</u> | <u>F</u> |
| Very Light | Light | Moderate | Heavy | Congested | Severe |

SR 8 (DeKalb/Gwinnett & Barrow Counties) - Evening**A**

Congestion Type: Mainline Signal Queue
 Location: SR 42
 Frequency: Most Observations
 Direction: Westbound
 Queue Population: 20 to 50 vpl
 Number of Lanes: 2
 Note: During one observation, congestion extended back through the upstream signals at Springdale Rd and Oakdale Rd.

B

Congestion Type: Mainline Signal Queue/
 Platoons
 Location: Clifton Rd
 Frequency: Intermittent
 Direction: Eastbound
 Queue Population: 20 to 25 vpl
 Number of Lanes: 2

C

Congestion Type: Cross Road Signal Queue
 Location: Clifton Rd
 Frequency: Intermittent
 Direction: Southbound
 Queue Population: 20 to 30 vpl
 Number of Lanes: 1

D

Congestion Type: Mainline Signal Queue
 Location: SR 155
 Frequency: Intermittent
 Direction: Eastbound
 Queue Population: 20 to 35 vpl
 Number of Lanes: 2

E

Congestion Type: Cross Road Signal Queue
 Location: Decatur Rd
 Frequency: Most observations before 5:30 p.m.
 Direction: Eastbound
 Queue Population: 20 to 40 vpl
 Number of Lanes: 2
 Note: Congestion was found in both the left-turn and thru-lanes at the intersection.

F

Congestion Type: Mainline Signal Queue
 Location: Dekalb Industrial Way
 Frequency: Peak Hour
 Direction: Eastbound
 Queue Population: 30 to 60 vpl
 Number of Lanes: 2
 Note: The head of the queue was found at one of the two closely spaced signals at Church St and Deklab Industrial Way.

G

Congestion Type: Mainline Signal Queue/
 Platoons
 Location: Orion Dr
 Frequency: Intermittent
 Direction: Eastbound
 Queue Population: 20 to 30 vpl
 Number of Lanes: 2

H

Congestion Type: Cross Road Signal Queue
 Location: Northlake Parkway
 Frequency: Intermittent
 Direction: Southbound
 Queue Population: 20 to 30 vpl
 Number of Lanes: 1

I

Congestion Type: Cross Road Signal Queue
 Location: Fellowship Rd
 Frequency: Intermittent
 Direction: Southbound
 Queue Population: 20 to 30 vpl
 Number of Lanes: 1

J

Congestion Type: Mainline Signal Queue/
 Platoons
 Location: Idlewood Rd
 Frequency: Intermittent
 Direction: Eastbound
 Queue Population: 25 to 35 vpl
 Number of Lanes: 2

K

Congestion Type: Mainline Signal Queue
 Location: SR 140
 Frequency: One day only
 Direction: Eastbound
 Queue Population: 20 to 25 vpl
 Number of Lanes: 2

L

Congestion Type: Cross Road Signal Queue
 Location: SR 140
 Frequency: Intermittent
 Direction: Southbound
 Queue Population: 20 to 25 vpl
 Number of Lanes: 1
 Note: The head of the queue was found in the left-turn lane.

M

Congestion Type: Cross Road Signal Queue
 Location: SR 140
 Frequency: Intermittent
 Direction: Northbound
 Queue Population: 20 to 25 vpl
 Number of Lanes: 2

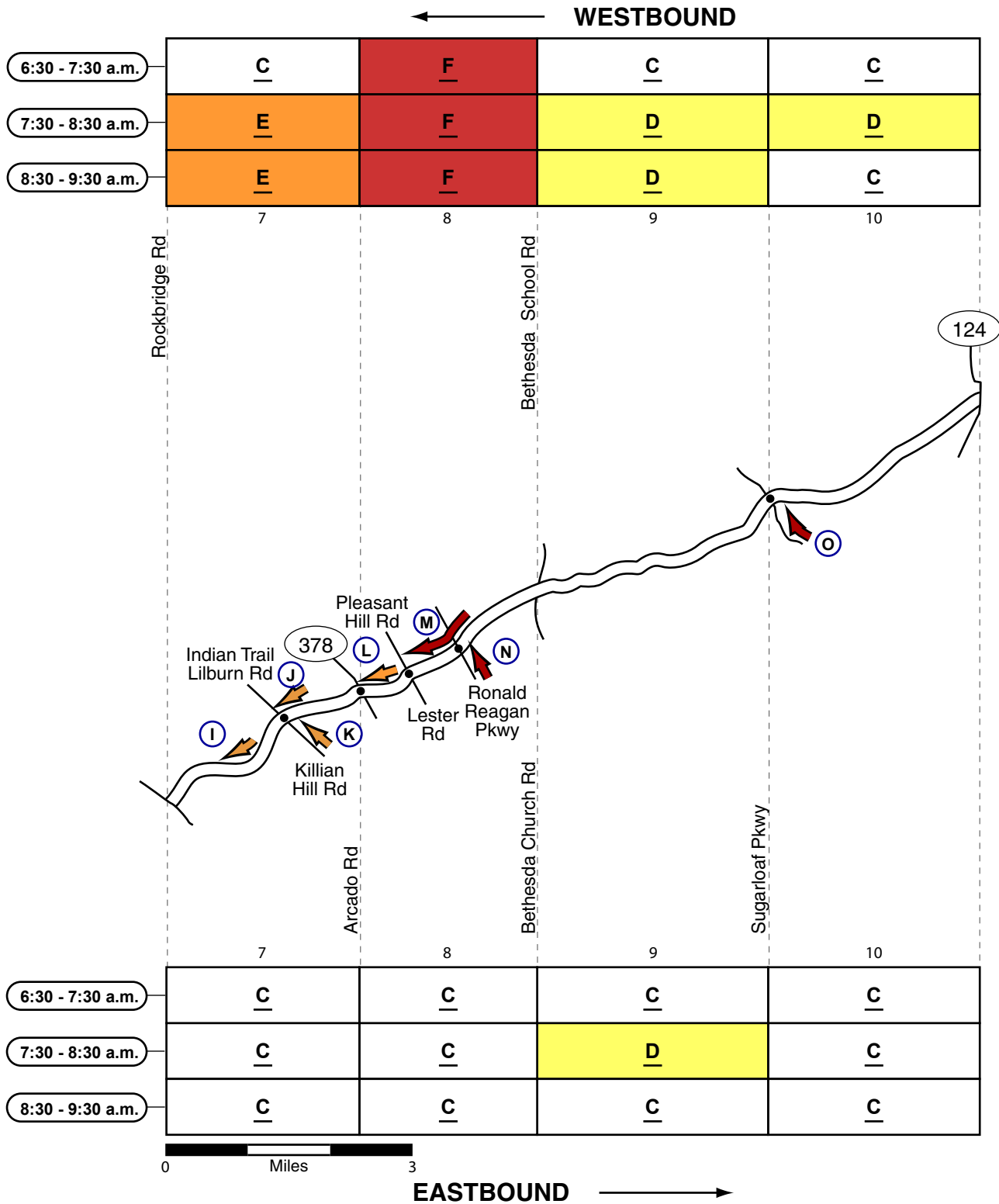
SA

Congestion Type: Surveyed Cross Road
 Signal Queue
 Location: SR 42
 Frequency: Intermittent
 Direction: Northbound
 Queue Population: 20 to 30 vpl
 Number of Lanes: 2

SB

Congestion Type: Surveyed Cross Road
 Signal Queue
 Location: SR 155
 Frequency: Intermittent
 Direction: Southbound
 Queue Population: 20 to 30 vpl
 Number of Lanes: 2

SR 8 (DeKalb/Gwinnett & Barrow Counties) - Morning



Arterial LOS Legend

| | | | | | |
|------------|----------|----------|----------|-----------|----------|
| <u>A</u> | <u>B</u> | <u>C</u> | <u>D</u> | <u>E</u> | <u>F</u> |
| Very Light | Light | Moderate | Heavy | Congested | Severe |

SR 8 (DeKalb/Gwinnett & Barrow Counties) - Morning

I

Congestion Type: Platoons
Location: Between SR 378 & Rockbridge Rd
Frequency: Intermittent
Direction: Westbound
Platoon Population: 25 to 35 vpl
Number of Lanes: 2

J

Congestion Type: Mainline Signal Queue
Location: Indian Trail Lilburn Rd
Frequency: Intermittent
Direction: Westbound
Queue Population: 20 to 30 vpl
Number of Lanes: 2

K

Congestion Type: Cross Road Signal Queue
Location: Killian Hill Rd
Frequency: One time only
Direction: Northbound
Queue Population: 30 to 40 vpl
Number of Lanes: 2

L

Congestion Type: Mainline Signal Queue
Location: SR 378
Frequency: Intermittent
Direction: Westbound
Queue Population: 20 to 25 vpl
Number of Lanes: 2

M

Congestion Type: Mainline Signal Queue
Location: Pleasant Hill Rd
Frequency: Most Observations
Direction: Westbound
Queue Population: 50 to 80 vpl
Number of Lanes: 2
Note: On some days but not others, congestion extended back through the upstream signal at Ronald Reagan Parkway.
Congestion may have been exacerbated by ongoing construction between Ronald Reagan Parkway and Pleasant Hill Rd (shoulder work).

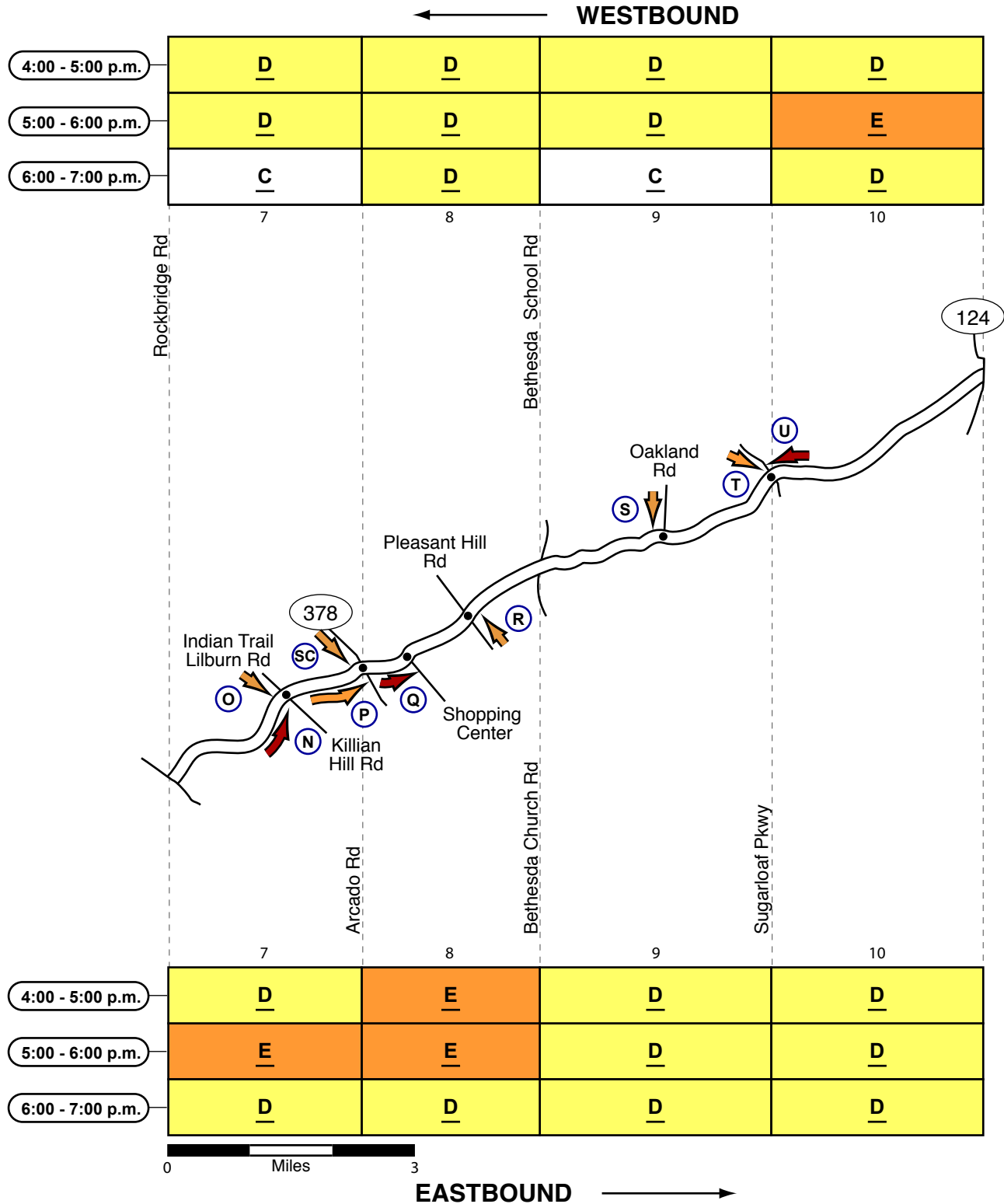
N

Congestion Type: Cross Road Signal Queue
Location: Ronald Reagan Parkway
Frequency: Peak Hour
Direction: Westbound
Queue Population: 20 to 40 vpl
Number of Lanes: 2
Note: Congestion was exacerbated by downstream congestion on SR 8 approaching Pleasant Hill Rd.

O

Congestion Type: Cross Road Signal Queue
Location: Sugarloaf Parkway
Frequency: Most observations after 8:00 a.m.
Direction: Northbound
Queue Population: 20 to 40 vpl
Number of Lanes: 2

SR 8 (DeKalb/Gwinnett & Barrow Counties) - Evening



Arterial LOS Legend

| | | | | | |
|------------|----------|----------|----------|-----------|----------|
| <u>A</u> | <u>B</u> | <u>C</u> | <u>D</u> | <u>E</u> | <u>F</u> |
| Very Light | Light | Moderate | Heavy | Congested | Severe |

SR 8 (DeKalb/Gwinnett & Barrow Counties) - Evening**N**

Congestion Type: Mainline Signal Queue

Location: Killian Hill Rd

Frequency: Peak Hour

Direction: Eastbound

Queue Population: 30 to 50 vpl

Number of Lanes: 2

Note: During one observation only, congestion backed through the upstream signal at Main St.

O

Congestion Type: Cross Road Signal Queue

Location: Indian Trail Lilburn Rd

Frequency: Intermittent

Direction: Southbound

Queue Population: 20 to 25 vpl

Number of Lanes: 2

P

Congestion Type: Mainline Signal Queue/Platoons

Location: SR 378

Frequency: Intermittent

Direction: Eastbound

Queue Population: 30 to 40 vpl

Number of Lanes: 2

Q

Congestion Type: Mainline Signal Queue

Location: Shopping Center west of Pleasant Hill Rd

Frequency: Intermittent

Direction: Eastbound

Queue Population: 20 to 40 vpl

Number of Lanes: 2

R

Congestion Type: Cross Road Signal Queue

Location: Pleasant Hill Rd

Frequency: Intermittent

Direction: Northbound

Queue Population: 20 to 30 vpl

Number of Lanes: 1

S

Congestion Type: Cross Road Signal Queue

Location: Oakland Rd

Frequency: Intermittent

Direction: Southbound

Queue Population: 20 to 30 vpl

Number of Lanes: 1

T

Congestion Type: Cross Road Signal Queue

Location: Sugarloaf Parkway

Frequency: Intermittent

Direction: Southbound

Queue Population: 20 to 40 vpl

Number of Lanes: 2

U

Congestion Type: Mainline Signal Queue

Location: Sugarloaf Parkway

Frequency: Peak Hour

Direction: Westbound

Queue Population: 20 to 30 vpl

Number of Lanes: 2

SC

Congestion Type: Left-Turn Queue

Location: SR 378

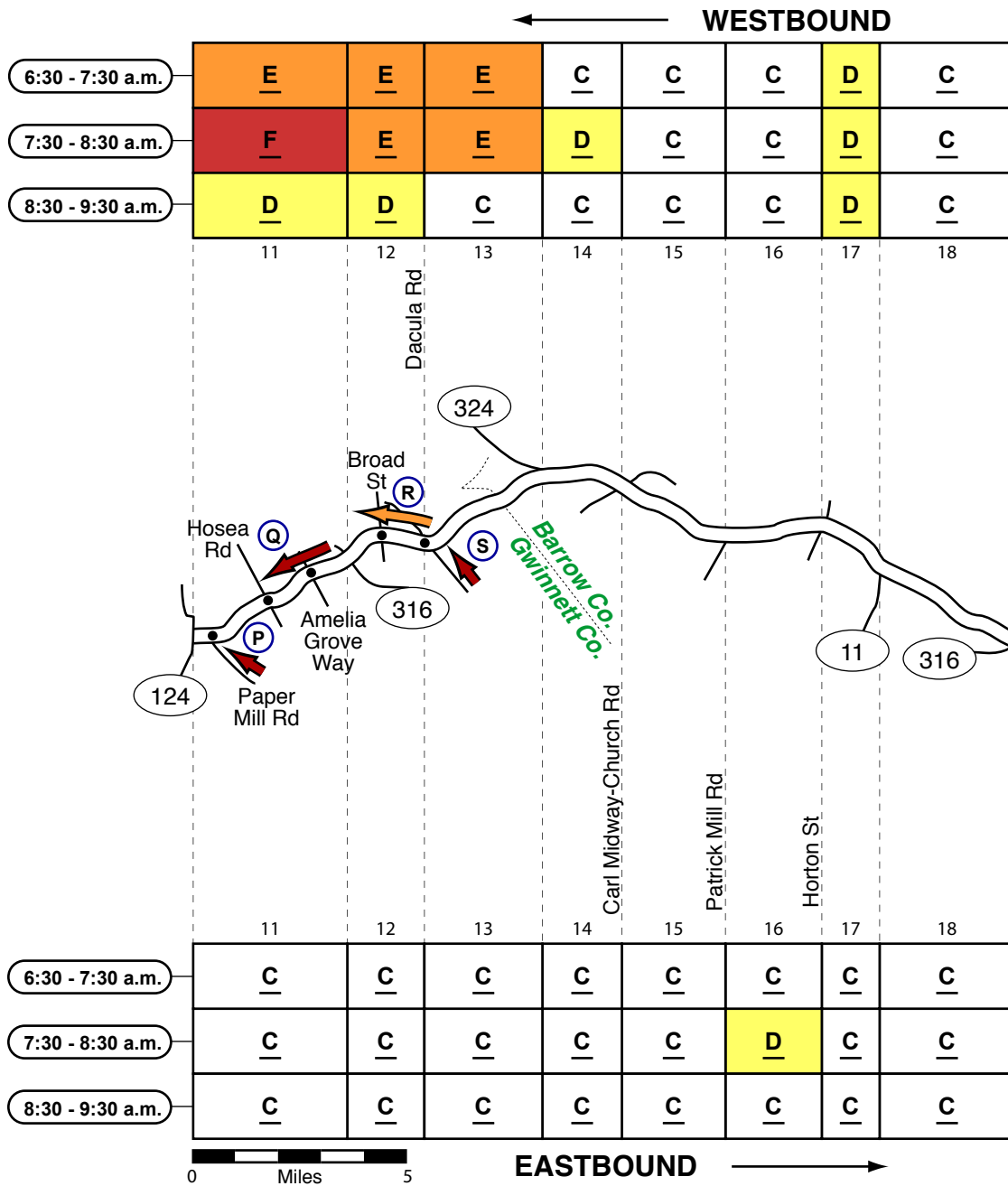
Frequency: Intermittent

Direction: Eastbound

Queue Population: 20 to 25 vpl

Number of Lanes: 1

SR 8 (DeKalb/Gwinnett & Barrow Counties) - Morning*



*Except segment 11, data on this page were based on one morning survey flight, vs. the normal sample procedure of four flights.

SR 8 (DeKalb/Gwinnett & Barrow Counties) - Morning*

P

Congestion Type: Cross Road Signal Queue

Location: Paper Mill Rd

Frequency: Between 7:30 and 8:00 a.m.

Direction: Northbound

Queue Population: 40 to 60 vpl

Number of Lanes: 1

Note: Factors contributing to the congestion were: 1) the signal at SR 8 and; 2) left-turning vehicles at multiple intersections approaching the SR 8 intersection.

Q

Congestion Type: Mainline Signal Queue

Location: Hosea Rd

Frequency: Peak Hour

Direction: Westbound

Queue Population: 40 to 120 vpl

Number of Lanes: 1

Note: During the peak period, congestion typically extended back through the upstream signals at Amelia Grove Way and Sweet Gum Rd.

R*

Congestion Type: Mainline Signal Queue/Platoons

Location: Vicinity of Dacula Rd & Broad St

Frequency: Intermittent

Direction: Westbound

Queue Population: 20 to 30 vpl

Number of Lanes: 1

S*

Congestion Type: Cross Road Signal Queue

Location: Dacula Rd

Frequency: Peak Hour

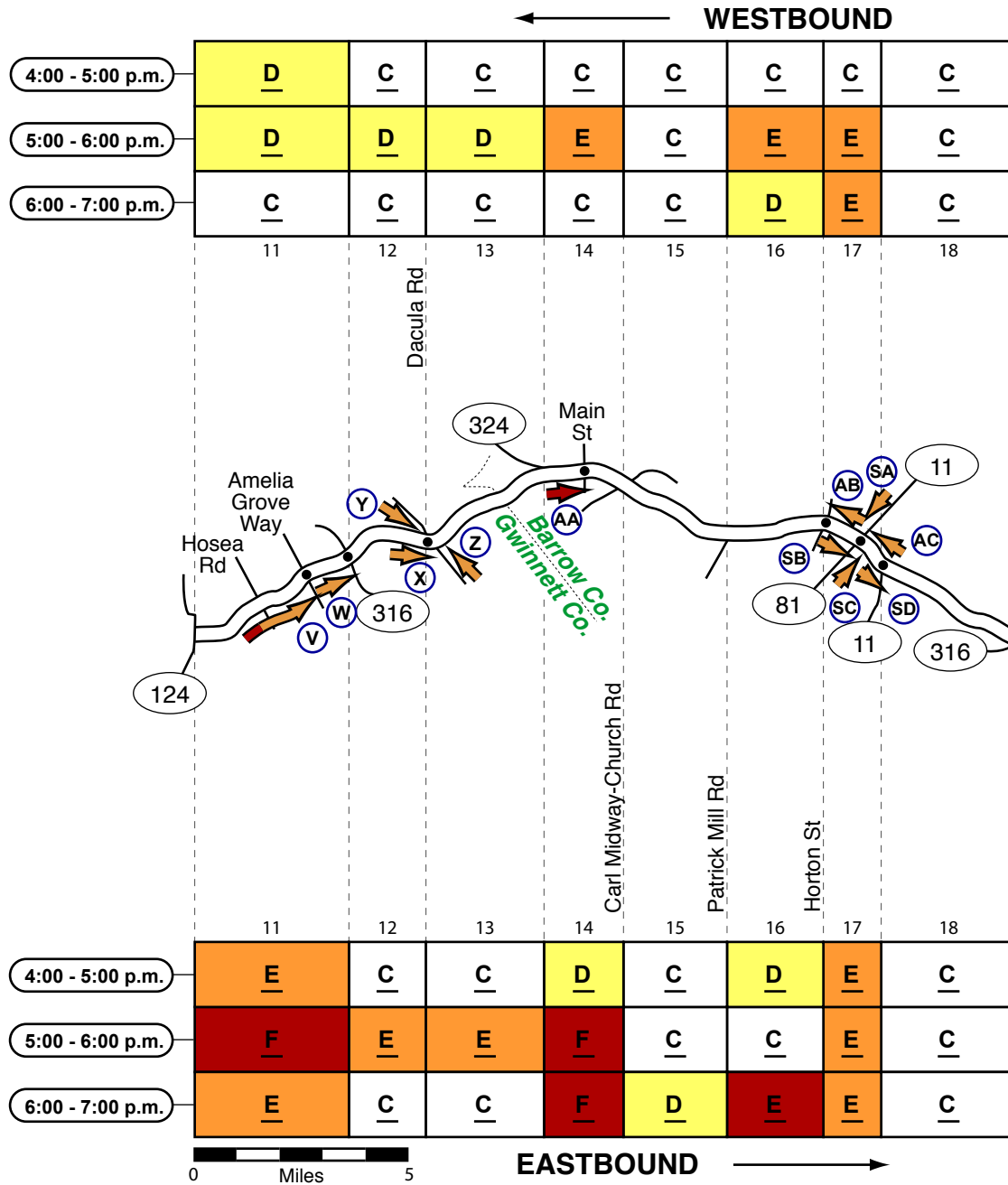
Direction: Northbound

Queue Population: 20 to 30 vpl

Number of Lanes: 1

**For notes R and S, findings were based on one morning survey flight, vs. the normal sample procedure of four flights.*

SR 8 (DeKalb/Gwinnett & Barrow Counties) - Evening*



*Except segment 11, data on this page were based on one evening survey flight, vs. the normal sample procedure of four flights.

SR 8 (DeKalb/Gwinnett & Barrow Counties) - Evening*

V

Congestion Type: Mainline Signal Queue/Platoons

Location: Hosea Rd

Frequency: Most Observations

Direction: Eastbound

Queue Population: 20 to 50 vpl

Number of Lanes: 1

Note: During the peak period a one to two mile zone of eastbound congestion was found on SR 8 between SR 124 and Sweet Gum Rd; factors contributing to the congestion were: 1) the signals at Hosea Rd and Amelia Grove Way and; 2) the lane drop (2 lanes to 1) east of SR 124.

W

Congestion Type: Mainline Signal Queue

Location: SR 316

Frequency: Intermittent

Direction: Eastbound

Queue Population: 20 to 40 vpl

Number of Lanes: 1

X*

Congestion Type: Mainline Signal Queue

Location: Dacula Rd

Frequency: One Time Only

Direction: Eastbound

Queue Population: 20 to 25 vpl

Number of Lanes: 1

Y*

Congestion Type: Cross Road Signal Queue

Location: Dacula Rd

Frequency: Intermittent

Direction: Southbound

Queue Population: 20 to 35 vpl

Number of Lanes: 1

Z*

Congestion Type: Cross Road Signal Queue

Location: Dacula Rd

Frequency: Peak Hour

Direction: Northbound

Queue Population: 20 to 25 vpl

Number of Lanes: 1

AA*

Congestion Type: Mainline Signal Queue

Location: Main St

Frequency: Peak Hour

Direction: Eastbound

Queue Population: 20 to 50 vpl

Number of Lanes: 1

AB*

Congestion Type: Mainline Signal Queue

Location: Horton St

Frequency: One Time Only

Direction: Westbound

Queue Population: 20 to 25 vpl

Number of Lanes: 1

AC

Congestion Type: Mainline Signal Queue

Location: SR 11 / SR 81

Frequency: Intermittent

Direction: Westbound

Queue Population: 20 to 25 vpl

Number of Lanes: 1

SA

Congestion Type: Surveyed Cross Road Signal Queue

Location: SR 11

Frequency: Intermittent

Direction: Southbound

Queue Population: 20 to 30 vpl

Number of Lanes: 1

SB

Congestion Type: Mainline Signal Queue

Location: SR 81

Frequency: One day only

Direction: Eastbound

Queue Population: 30 to 35 vpl

Number of Lanes: 1

SC

Congestion Type: Surveyed Cross Road Signal Queue

Location: SR 81

Frequency: Intermittent

Direction: Northbound

Queue Population: 20 to 30 vpl

Number of Lanes: 1

SD

Congestion Type: Mainline Signal Queue

Location: SR 11

Frequency: Intermittent

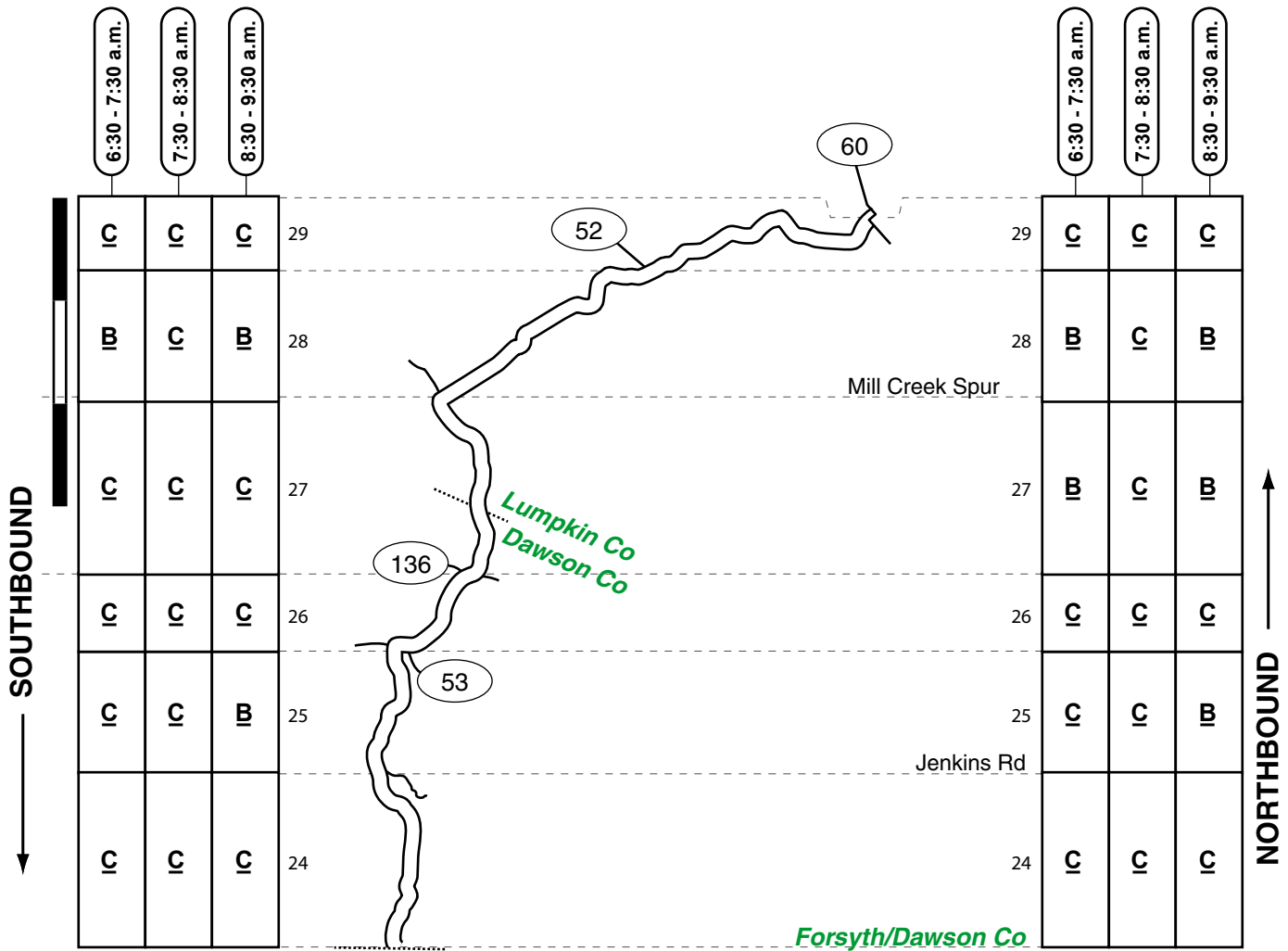
Direction: Eastbound

Queue Population: 20 to 25 vpl

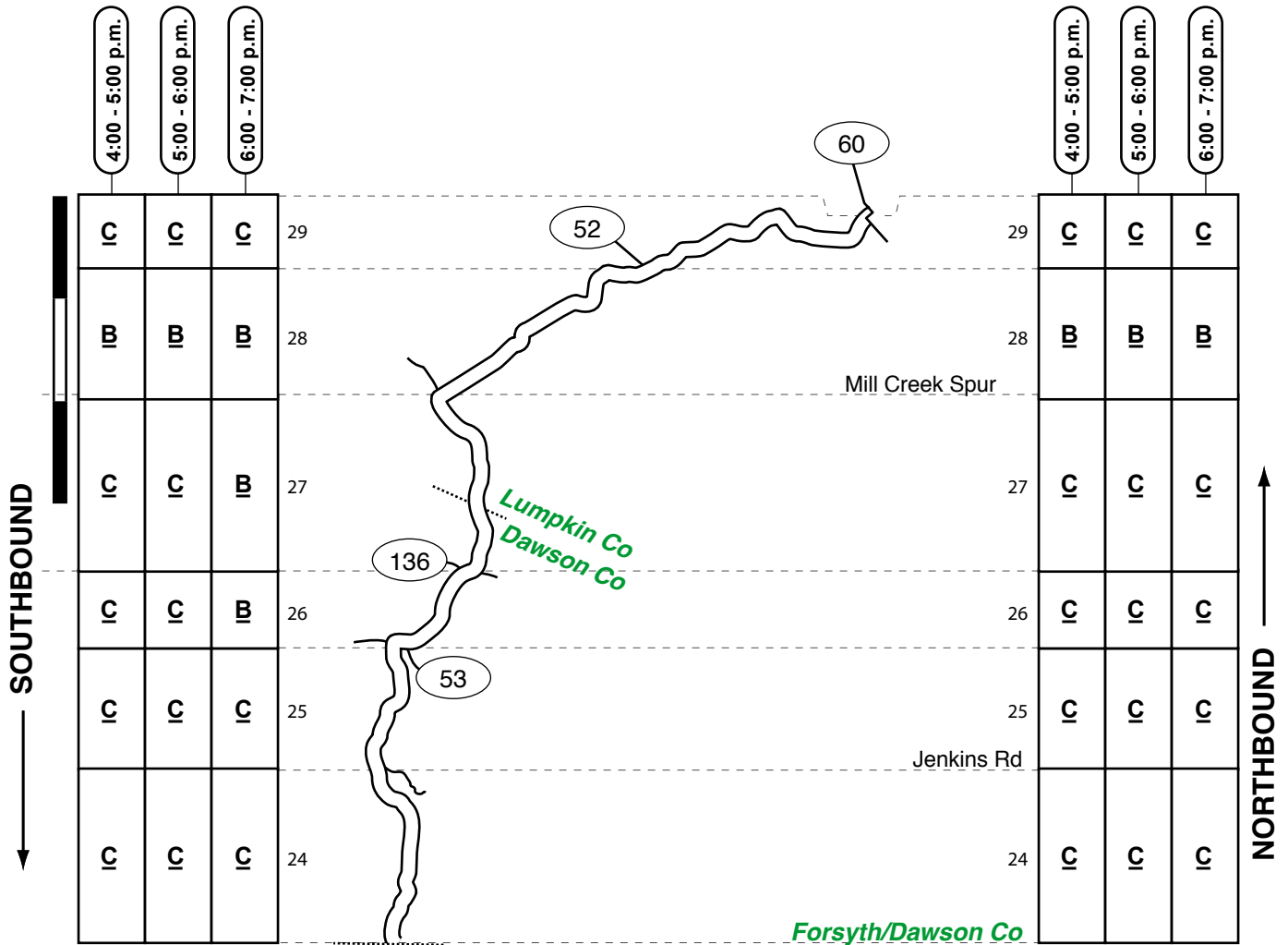
Number of Lanes: 1

**For notes X, Y, Z, AA, and AB, findings were based on one evening survey flight, vs. the normal sample procedure of four flights.*

SR 9 (Lumpkin/Dawson Counties) - Morning



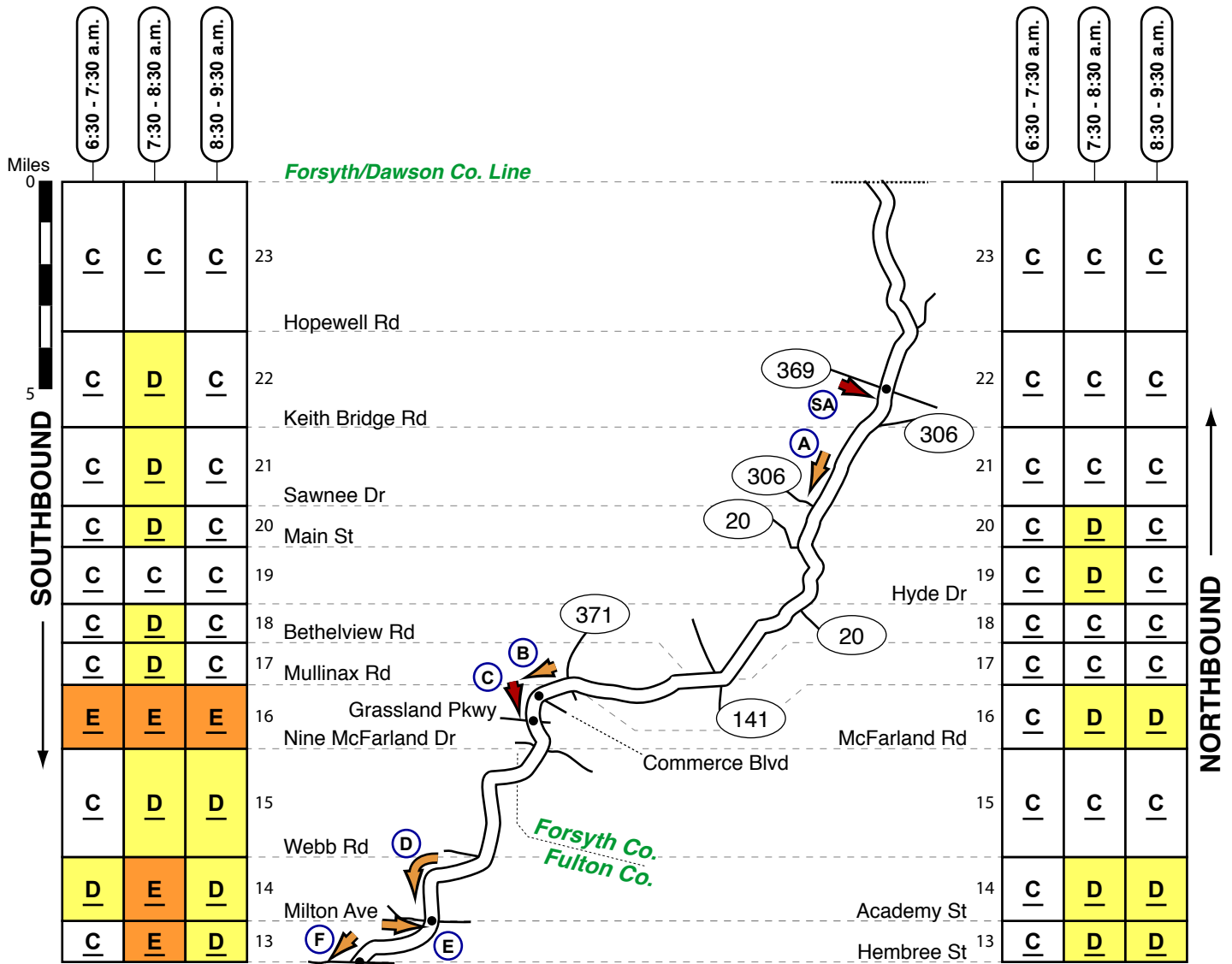
SR 9 (Lumpkin/Dawson Counties) - Evening



Arterial LOS Legend

| A | B | C | D | E | F |
|------------|-------|----------|-------|-----------|--------|
| Very Light | Light | Moderate | Heavy | Congested | Severe |

SR 9 (Fulton & Forsyth Counties) - Morning



SR 9 (Fulton & Forsyth Counties) - Morning

A

Congestion Type: Platoons

Location: Between Keith Bridge Rd and Sawnee Dr

Frequency: One time only

Direction: Southbound

Platoon Population: 25 to 30 vpl

Number of Lanes: 1

B

Congestion Type: Mainline Signal Queue

Location: Commerce Blvd

Frequency: Intermittent

Direction: Southbound

Queue Population: 20 to 30 vpl

Number of Lanes: 1

C

Congestion Type: Mainline Signal Queue

Location: Grassland Pkwy

Frequency: Peak Hour

Direction: Southbound

Queue Population: 20 to 40 vpl

Number of Lanes: 1

Note: During some observations, congestion appeared to back through the upstream signal at Commerce Blvd.

D

Congestion Type: Platoons

Location: Between Webb Rd & Milton Ave

Frequency: Intermittent

Direction: Southbound

Queue Population: 25 to 35 vpl

Number of Lanes: 1

E

Congestion Type: Cross Road Signal Queue

Location: Milton Ave

Frequency: Intermittent

Direction: Eastbound

Queue Population: 20 to 40 vpl

Number of Lanes: 1

F

Congestion Type: Mainline Signal Queue

Location: Hembree Rd

Frequency: Intermittent

Direction: Westbound

Queue Population: 20 to 25 vpl

Number of Lanes: 2

SA

Congestion Type: Surveyed Cross Road Signal Queue

Location: SR 369

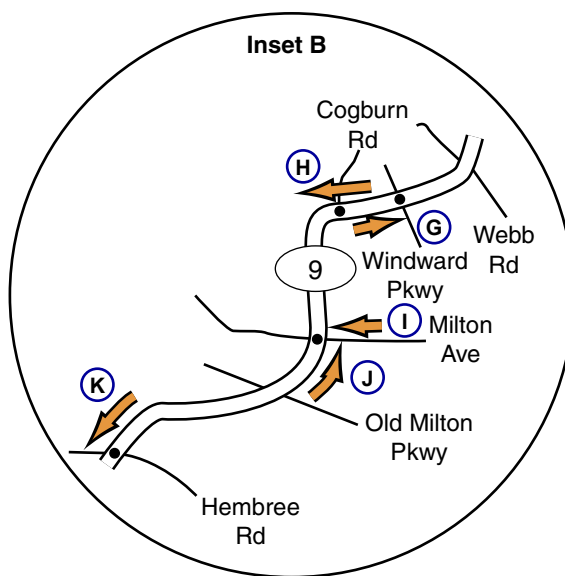
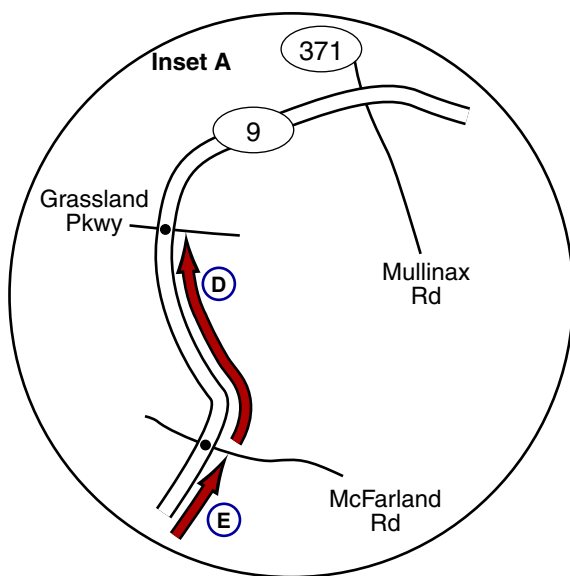
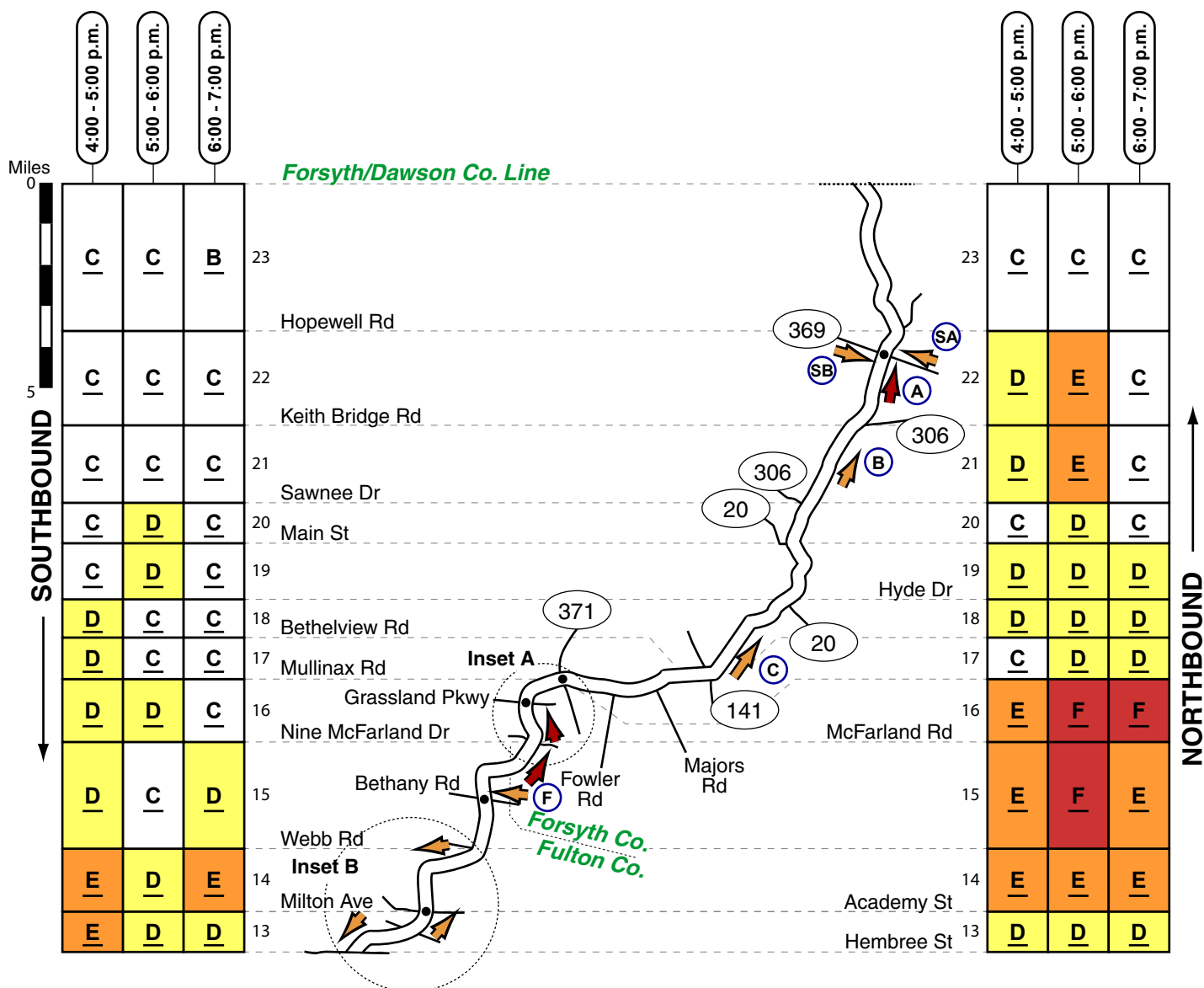
Frequency: Peak Hour

Direction: Eastbound

Queue Population: 45 to 75 vpl

Number of Lanes: 1

SR 9 (Fulton & Forsyth Counties) - Evening



Arterial LOS Legend

| | | | | | |
|------------|----------|----------|----------|-----------|----------|
| <u>A</u> | <u>B</u> | <u>C</u> | <u>D</u> | <u>E</u> | <u>F</u> |
| Very Light | Light | Moderate | Heavy | Congested | Severe |

SR 9 (Fulton & Forsyth Counties) - Evening

A

Congestion Type: Mainline Signal Queue
Location: SR 369
Frequency: Peak Hour
Direction: Northbound
Queue Population: 20 to 40 vpl
Number of Lanes: 1

B

Congestion Type: Platoons
Location: Between Sawnee Dr & Keith Bridge Rd
Frequency: Peak Hour
Direction: Northbound
Platoon Population: 25 to 40 vpl
Number of Lanes: 1

C

Congestion Type: Platoons
Location: Between SR 141 & SR 20
Frequency: Intermittent
Direction: Northbound (Eastbound)
Platoon Population: 25 to 35 vpl
Number of Lanes: 1

D

Congestion Type: Mainline Signal Queue
Location: Grassland Pkwy
Frequency: Most Observations
Direction: Northbound
Queue Population: 20 to 70 vpl
Number of Lanes: 1
Note: During the peak period, northbound congestion approaching
Grassland Pkwy typically extended back through the upstream
signal
at McFarland Rd.

E

Congestion Type: Mainline Signal Queue
Location: McFarland Rd
Frequency: Most Observations
Direction: Northbound
Queue Population: 20 to 60 vpl
Number of Lanes: 1
Note: During most observations, northbound congestion at
McFarland Rd was exacerbated by downstream congestion
(signal queue at Grassland Pkwy).

F

Congestion Type: Cross Road Signal Queue
Location: Bethany Rd
Frequency: Intermittent
Direction: Westbound
Queue Population: 20 to 25 vpl
Number of Lanes: 1

G

Congestion Type: Mainline Signal Queue
Location: Windward Pkwy
Frequency: Intermittent
Direction: Northbound
Queue Population: 20 to 25 vpl
Number of Lanes: 1

H

Congestion Type: Queues / Platoons
Location: Cogburn Rd
Frequency: Intermittent
Direction: Southbound
Queue Population: 25 to 30 vpl
Number of Lanes: 1

I

Congestion Type: Cross Road Signal Queue
Location: Milton Ave
Frequency: Intermittent
Direction: Westbound
Queue Population: 20 to 30 vpl
Number of Lanes: 1

J

Congestion Type: Mainline Signal Queue
Location: Milton Ave
Frequency: Intermittent
Direction: Northbound
Queue Population: 20 to 30 vpl
Number of Lanes: 2

K

Congestion Type: Mainline Signal Queue
Location: Hembree St
Frequency: Intermittent
Direction: Southbound
Queue Population: 20 to 25 vpl
Number of Lanes: 2

SA

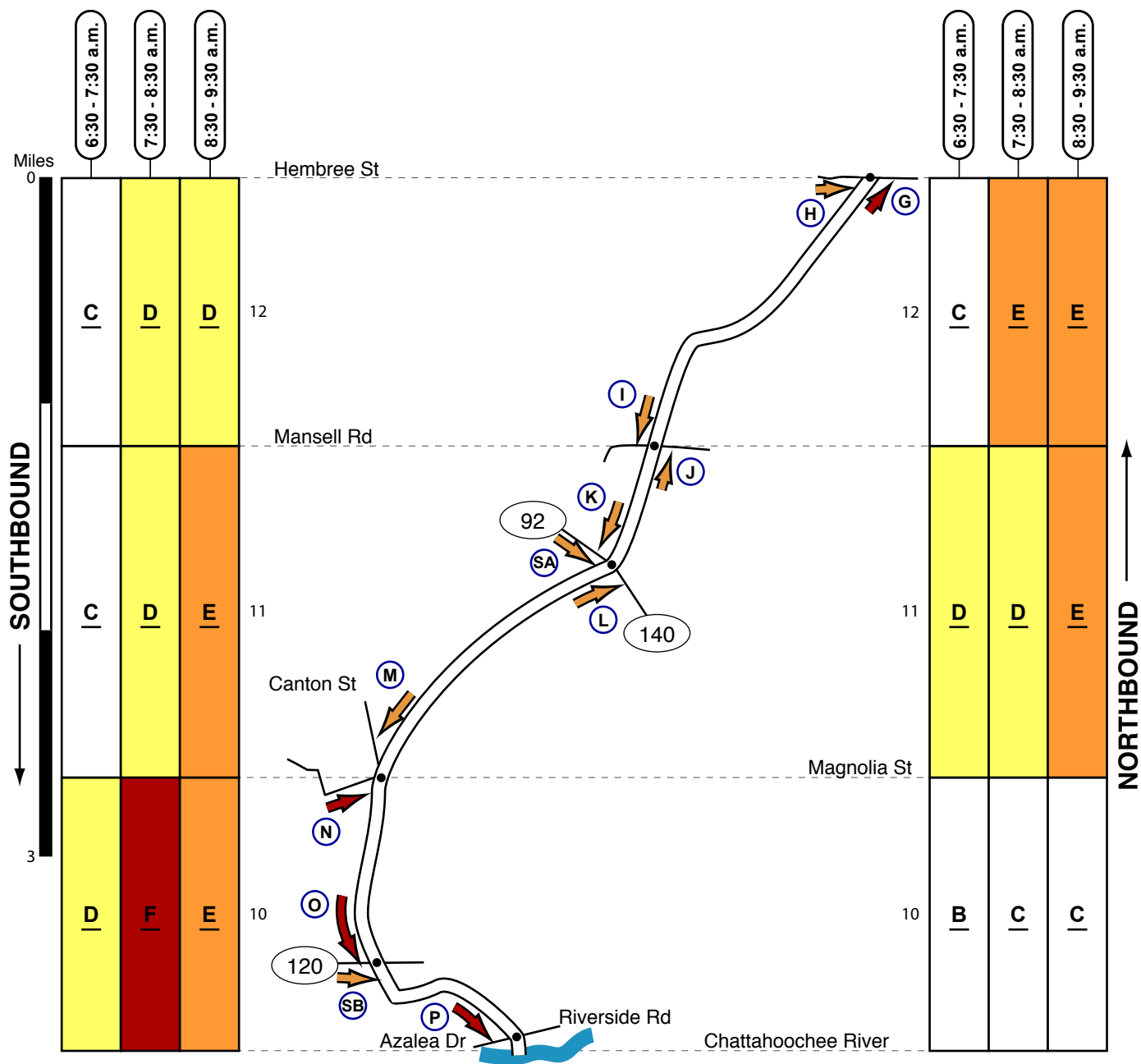
Congestion Type: Surveyed Cross Road Signal Queue
Location: SR 369
Frequency: Peak Hour
Direction: Westbound
Queue Population: 30 to 50 vpl
Number of Lanes: 1

SB

Congestion Type: Surveyed Cross Road Signal Queue
Location: SR 369
Frequency: Intermittent
Direction: Eastbound
Queue Population: 20 to 30 vpl
Number of Lanes: 1
Note: During one observation, the queue contained
approximately 50 vehicles.

Spring 2010

SR 9 (Fulton County) - Morning



SR 9 (Fulton County) - Morning

G

Congestion Type: Mainline Signal Queue
Location: Hembree St
Frequency: Peak Hour
Direction: Northbound
Queue Population: 20 to 30 vpl
Number of Lanes: 2

H

Congestion Type: Cross Road Signal Queue
Location: Hembree Rd
Frequency: Intermittent
Direction: Eastbound
Queue Population: 20 to 35 vpl
Number of Lanes: 1

I

Congestion Type: Mainline Signal Queue
Location: Mansell Rd
Frequency: Intermittent
Direction: Southbound
Queue Population: 20 to 30 vpl
Number of Lanes: 2

J

Congestion Type: Mainline Signal Queue
Location: Mansell Rd
Frequency: Intermittent
Direction: Northbound
Queue Population: 20 to 25 vpl
Number of Lanes: 2

K

Congestion Type: Mainline Signal Queue
Location: SR 92
Frequency: Intermittent
Direction: Southbound
Queue Population: 20 to 25 vpl
Number of Lanes: 2

L

Congestion Type: Mainline Signal Queue
Location: SR 92/140
Frequency: Intermittent
Direction: Northbound
Queue Population: 20 to 25 vpl
Number of Lanes: 2

M

Congestion Type: Mainline Signal Queue
Number of Lanes: 2
Location: Canton St
Frequency: Intermittent
Direction: Southbound
Queue Population: 20 to 30 vpl

N

Congestion Type: Cross Road Signal Queue
Location: Magnolia St
Frequency: Most Observations
Direction: Eastbound
Queue Population: 20 to 40 vpl
Number of Lanes: 2

O

Congestion Type: Mainline Signal Queue
Location: Atlanta St
Frequency: Peak Hour
Direction: Westbound
Queue Population: 20 to 50 vpl
Number of Lanes: 2

P

Congestion Type: Mainline Signal Queue
Location: Azalea Dr
Frequency: Peak hour
Direction: Southbound
Queue Population: 20 to 40 vpl
Number of Lanes: 2

SA

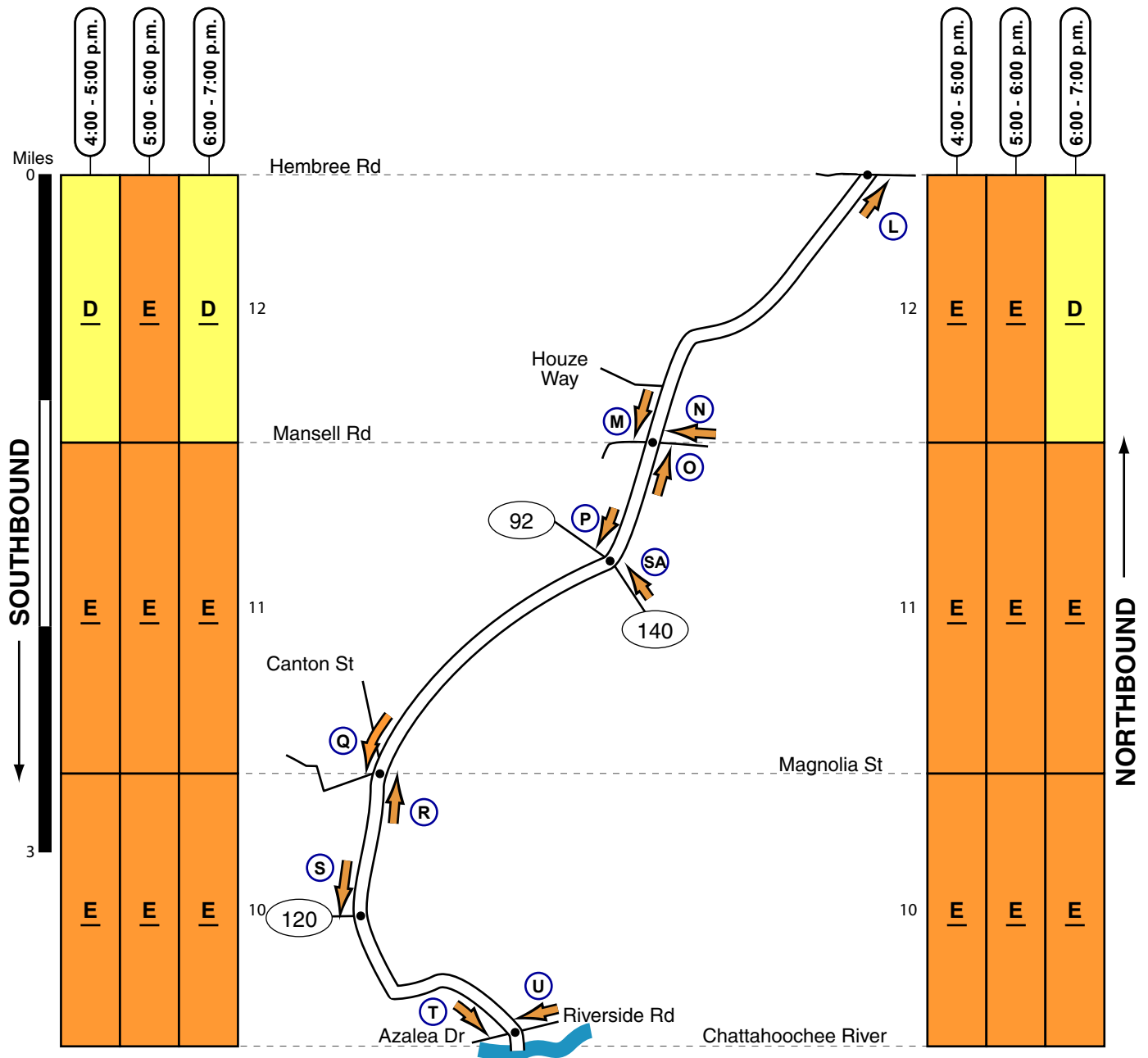
Congestion Type: Surveyed Cross Road Signal Queue
Location: SR 120 / SR 9
Frequency: Intermittent
Direction: Eastbound
Queue Population: 20 to 30 vpl
Number of Lanes: 3

SB

Congestion Type: Surveyed Cross Road Signal Queue
Location: SR 120
Frequency: Intermittent
Direction: Eastbound
Queue Population: 20 to 25 vpl
Number of Lanes: 2

Spring 2010

SR 9 (Fulton County) - Evening



Arterial LOS Legend

| A | B | C | D | E | F |
|------------|-------|----------|-------|-----------|--------|
| Very Light | Light | Moderate | Heavy | Congested | Severe |

SR 9 (Fulton County) - Evening

L

Congestion Type: Mainline Signal Queue
Location: Hembree St
Frequency: Intermittent
Direction: Northbound
Queue Population: 20 to 25 vpl
Number of Lanes: 2

M

Congestion Type: Mainline Signal Queue
Location: Mansell Rd
Frequency: Intermittent
Direction: Southbound
Queue Population: 20 to 30 vpl
Number of Lanes: 2

N

Congestion Type: Cross Road Signal Queue
Location: Mansell Rd
Frequency: Intermittent
Direction: Westbound
Queue Population: 20 to 30 vpl
Number of Lanes: 2

O

Congestion Type: Mainline Signal Queue
Location: Mansell Rd
Frequency: Intermittent
Direction: Northbound
Queue Population: 20 to 30 vpl
Number of Lanes: 2

P

Congestion Type: Mainline Signal Queue
Location: SR 92
Frequency: Intermittent
Direction: Southbound
Queue Population: 20 to 40 vpl
Number of Lanes: 2

Q

Congestion Type: Mainline Signal Queue
Location: Canton St
Frequency: Intermittent
Direction: Southbound
Queue Population: 20 to 30 vpl
Number of Lanes: 2

Note: During one observation, congestion extended back through the upstream signal at Norcross St; approximately 60 vehicles per lane were queued at the signal.

R

Congestion Type: Mainline Signal Queue
Location: Canton St
Frequency: Intermittent
Direction: Northbound
Queue Population: 20 to 30 vpl
Number of Lanes: 1
Note: When congested, vehicles were queued in the one thru-lane at the signal at Canton St (dedicated lane to northbound Canton St).

S

Congestion Type: Mainline Signal Queue
Location: Atlanta St
Frequency: Intermittent
Direction: Southbound
Queue Population: 20 to 30 vpl
Number of Lanes: 1
Note: When congested, vehicles were queued in the right lane approaching the ninety-degree right turn onto Marietta Hwy (continuation of SR 120).

T

Congestion Type: Mainline Signal Queue
Location: Azalea Dr
Frequency: Intermittent
Direction: Southbound
Queue Population: 20 to 35 vpl
Number of Lanes: 1
Note: During the evening commuter period, one lane is open to southbound traffic while two lanes are open to northbound traffic (reversible center lane).

U

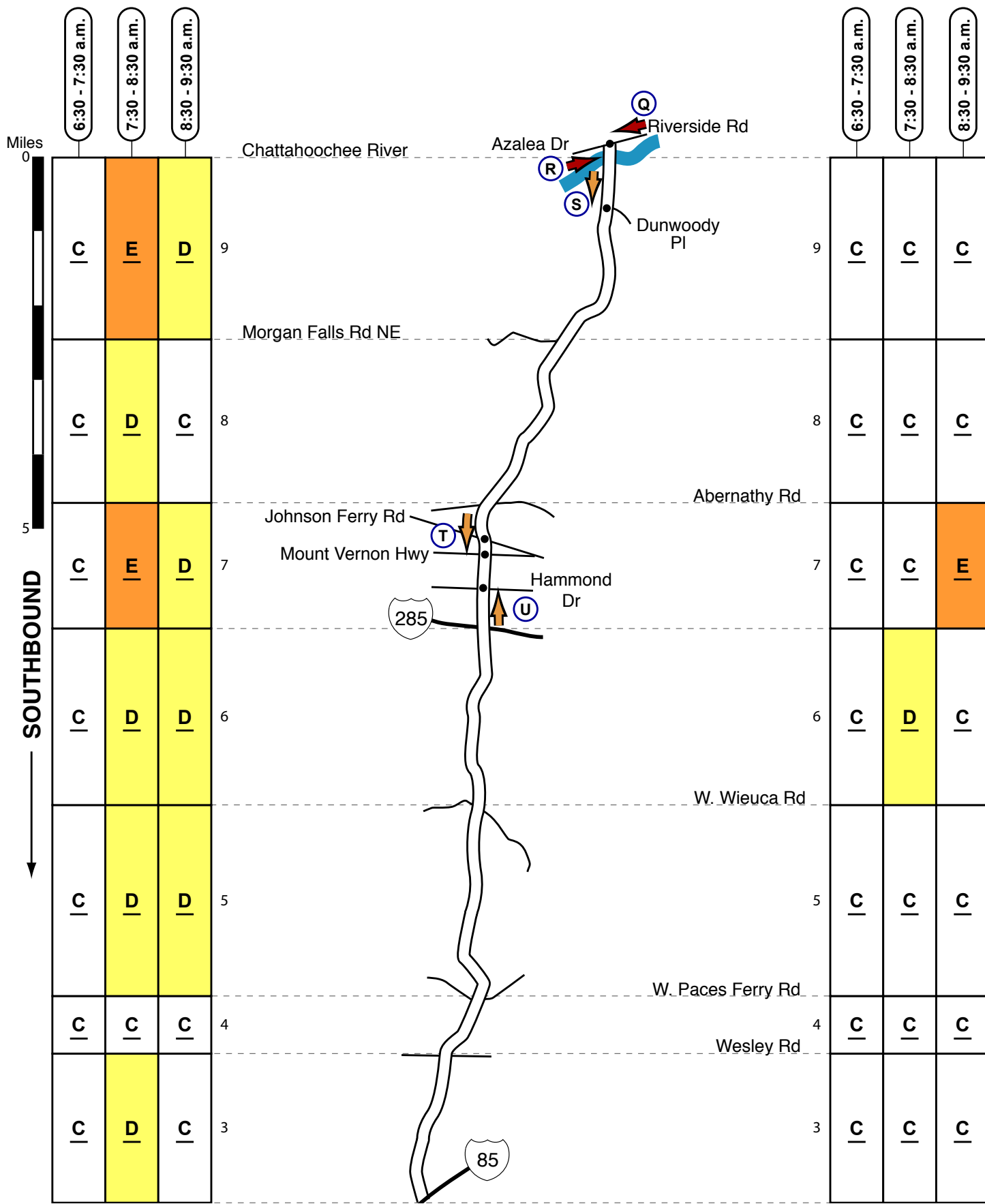
Congestion Type: Cross Road Signal Queue
Location: Riverside Dr
Frequency: Intermittent
Direction: Westbound
Queue Population: 20 to 30 vpl
Number of Lanes: 1

SA

Congestion Type: Surveyed Cross Road Signal Queue
Location: SR 140
Frequency: Intermittent
Direction: Northbound
Queue Population: 20 to 30 vpl
Number of Lanes: 3

Spring 2010

SR 9 (Fulton County) - Morning



SR 9 (Fulton County) - Morning

Q

Congestion Type: Cross Road Signal Queue

Location: Riverside Dr

Frequency: Most Observations

Direction: Westbound

Queue Population: 20 to 50 vpl

Number of Lanes: 1

R

Congestion Type: Cross Road Signal Queue

Location: Azalea Dr

Frequency: Peak hour

Direction: Eastbound

Queue Population: 20 to 70 vpl

Number of Lanes: 1

S

Congestion Type: Mainline Signal Queue

Location: Dunwoody Pl

Frequency: Intermittent

Direction: Southbound

Queue Population: 20 to 30 vpl

Number of Lanes: 2

T

Congestion Type: Mainline Signal Queue

Location: Johnson Ferry Rd & Mt. Vernon Hwy

Frequency: Intermittent

Direction: Southbound

Queue Population: 20 to 30 vpl

Number of Lanes: 2

U

Congestion Type: Mainline Signal Queue

Location: Hammond Dr

Frequency: Intermittent

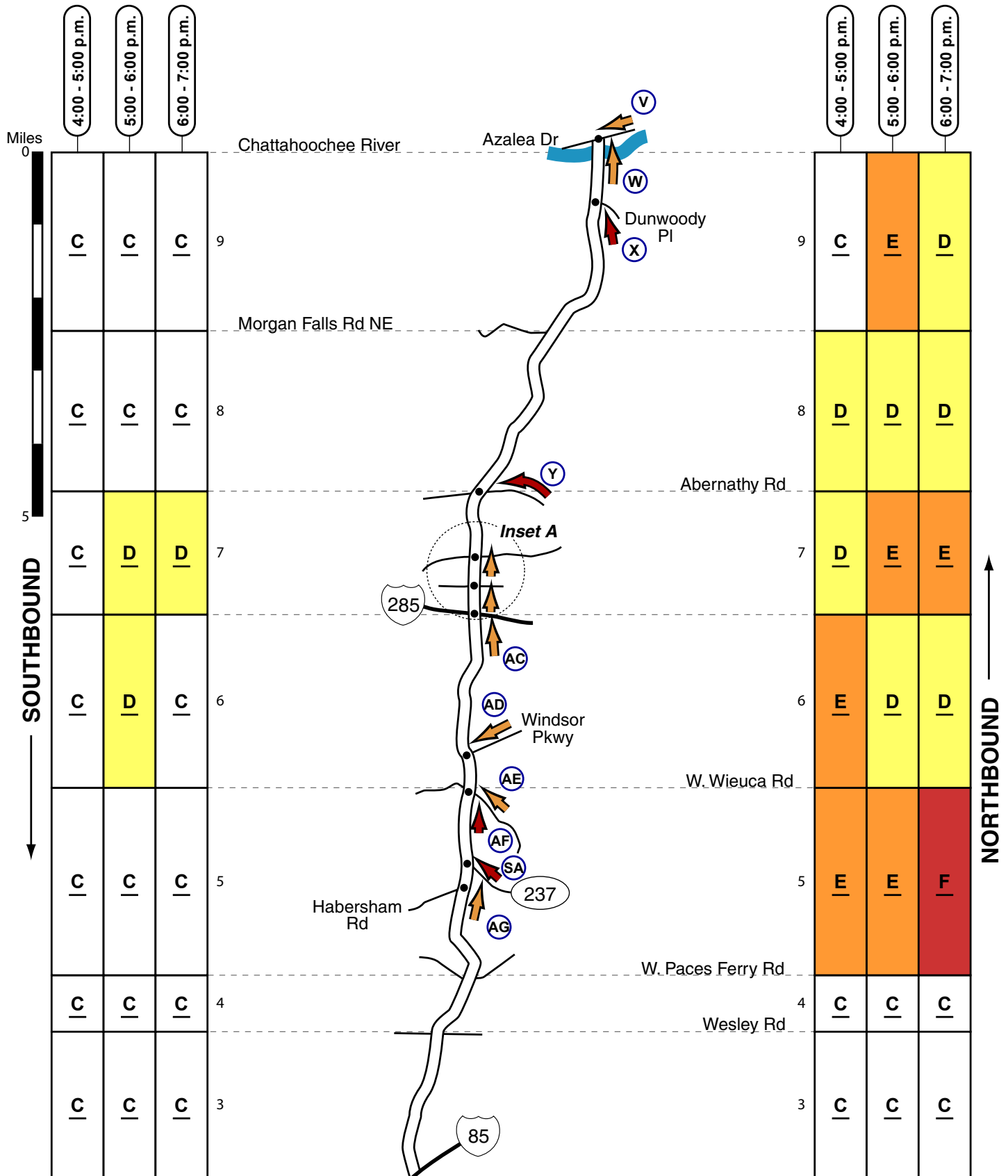
Direction: Northbound

Queue Population: 20 to 30 vpl

Number of Lanes: 2

Spring 2010

SR 9 (Fulton County) - Evening



Arterial LOS Legend

| A | B | C | D | E | F |
|------------|-------|----------|-------|-----------|--------|
| Very Light | Light | Moderate | Heavy | Congested | Severe |

SR 9 (Fulton County) - Evening

V

Congestion Type: Cross Road Signal Queue
 Location: Riverside Dr
 Frequency: Intermittent
 Direction: Westbound
 Queue Population: 20 to 30 vpl
 Number of Lanes: 1

W

Congestion Type: Mainline Signal Queue
 Location: Azalea Dr
 Frequency: Intermittent
 Direction: Northbound
 Queue Population: 20 to 50 vpl
 Number of Lanes: 2
 Note: A dedicated left-turn lane (northbound) at the signal was added between the surveys in 2007 and 2010.

X

Congestion Type: Mainline Signal Queue
 Location: Dunwoody Pl
 Frequency: Peak Hour
 Direction: Northbound
 Queue Population: 20 to 70 vpl
 Number of Lanes: 2

Y

Congestion Type: Cross Road Signal Queue
 Location: Abernathy Rd
 Frequency: Most Observations
 Direction: Westbound
 Queue Population: 20 to 100 vpl
 Number of Lanes: 2

Z

Congestion Type: Mainline Signal Queue
 Location: Johnson Ferry Rd / Mt Vernon
 Frequency: Intermittent
 Direction: Northbound
 Queue Population: 20 to 40 vpl
 Number of Lanes: 2

AA

Congestion Type: Cross Road Signal Queue
 Location: Hammond Dr
 Frequency: Intermittent
 Direction: Westbound
 Queue Population: 20 to 25 vpl
 Number of Lanes: 2

AB

Congestion Type: Mainline Signal Queue
 Location: Hammond Dr
 Frequency: Intermittent
 Direction: Northbound
 Queue Population: 20 to 40 vpl
 Number of Lanes: 2
 Note: During some observations, congestion appeared to back through the upstream signal at Carpenter Dr.

AC

Congestion Type: Mainline Signal Queue
 Location: I-285
 Frequency: Intermittent
 Direction: Northbound
 Queue Population: 20 to 40 vpl
 Number of Lanes: 2

AD

Congestion Type: Cross Road Signal Queue
 Location: Windsor Pkwy
 Frequency: Intermittent
 Direction: Westbound
 Queue Population: 20 to 30 vpl
 Number of Lanes: 1

AE

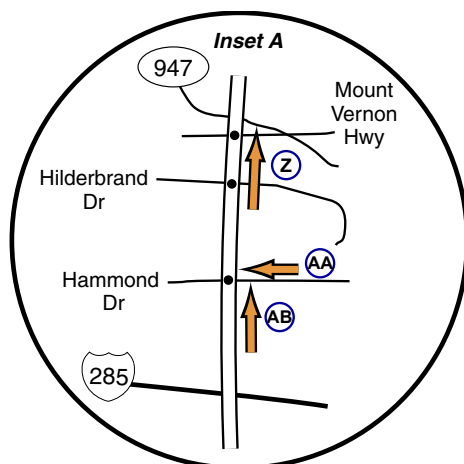
Congestion Type: Cross Road Signal Queue
 Location: Wieuca Rd
 Frequency: Intermittent
 Direction: Westbound
 Queue Population: 20 to 30 vpl
 Number of Lanes: 1

AF

Congestion Type: Mainline Signal Queue
 Location: W. Wieuca Rd
 Frequency: Most Observations
 Direction: Northbound
 Queue Population: 20 to 50 vpl
 Number of Lanes: 2
 Note: Congestion at W. Wieuca Dr typically extended back through the closely spaced upstream signal at Wieuca Dr.

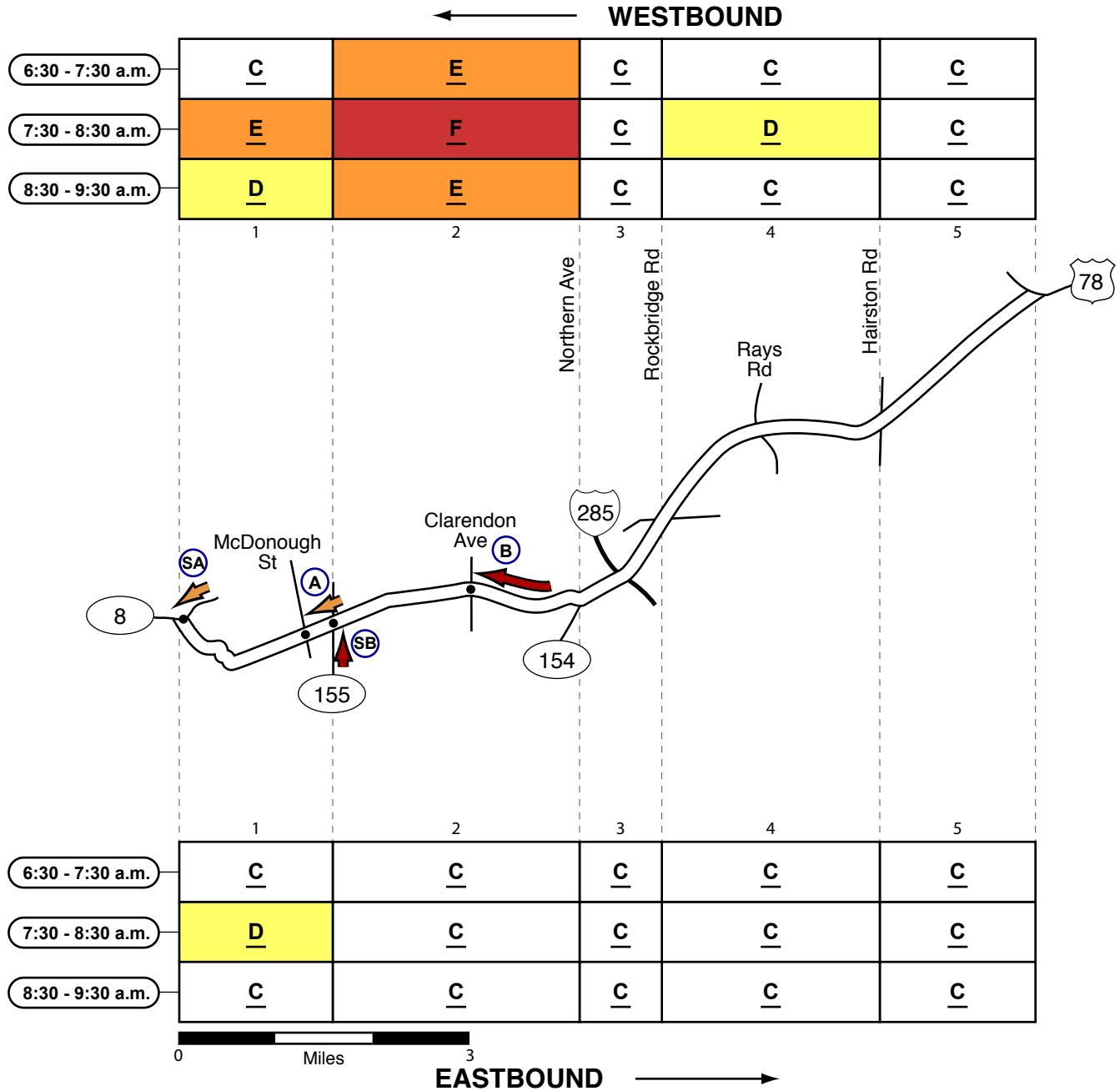
AG

Congestion Type: Mainline Signal Queue
 Location: SR 237 & Habersham Rd
 Frequency: Intermittent
 Direction: Northbound
 Queue Population: 20 to 30 vpl
 Number of Lanes: 2



Spring 2010

SR 10 (DeKalb County) - Morning



Arterial LOS Legend

| | | | | | |
|------------|----------|----------|----------|-----------|----------|
| <u>A</u> | <u>B</u> | <u>C</u> | <u>D</u> | <u>E</u> | <u>F</u> |
| Very Light | Light | Moderate | Heavy | Congested | Severe |

Spring 2010

SR 10 (DeKalb County) - Morning

A

Congestion Type: Mainline Signal Queue
Location: McDonough St
Frequency: Intermittent
Direction: Westbound
Queue Population: 20 to 30 vpl
Number of Lanes: 1

B

Congestion Type: Mainline Signal Queue
Location: Clarendon Ave
Frequency: Peak Hour
Direction: Westbound
Queue Population: 20 to 60 vpl
Number of Lanes: 1

SA

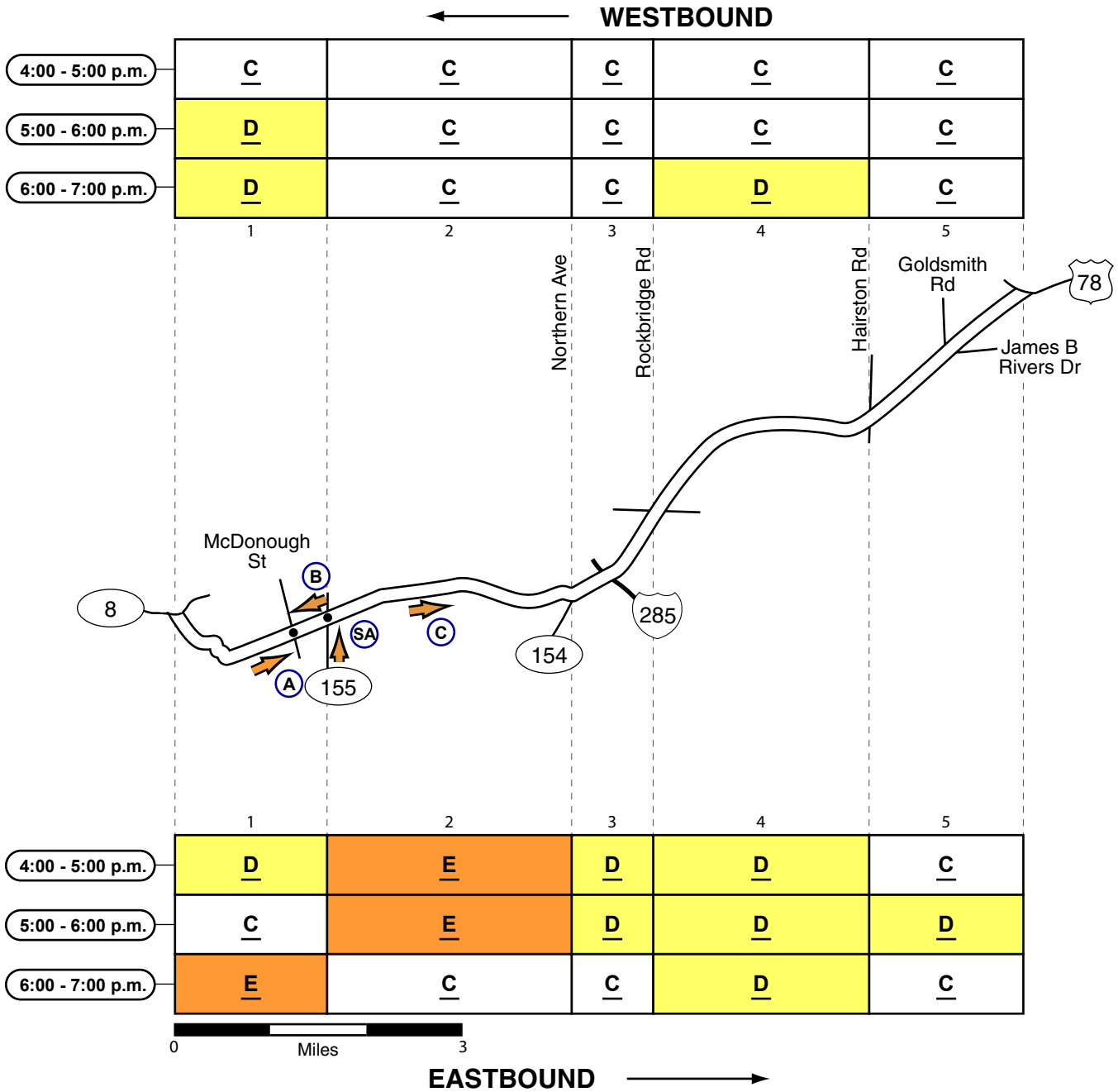
Congestion Type: Surveyed Cross Road Signal Queue
Location: SR 8
Frequency: Intermittent
Direction: Westbound
Queue Population: 20 to 25 vpl
Number of Lanes: 2

SB

Congestion Type: Surveyed Cross Road Signal Queue
Location: SR 155
Frequency: Peak Hour
Direction: Northbound
Queue Population: 20 to 30 vpl
Number of Lanes: 1

Spring 2010

SR 10 (DeKalb County) - Evening



Arterial LOS Legend

| | | | | | |
|------------|----------|----------|----------|-----------|----------|
| <u>A</u> | <u>B</u> | <u>C</u> | <u>D</u> | <u>E</u> | <u>F</u> |
| Very Light | Light | Moderate | Heavy | Congested | Severe |

SR 10 (DeKalb County) - Evening

A

Congestion Type: Mainline Signal Queue

Location: McDonough St

Frequency: Intermittent

Direction: Eastbound

Queue Population: 20 to 25 vpl

Number of Lanes: 1

B

Congestion Type: Mainline Signal Queue

Location: McDonough St

Frequency: Intermittent

Direction: Westbound

Queue Population: 20 to 30 vpl

Number of Lanes: 1

C

Congestion Type: Platoons

Location: Between SR 155 & Northern Ave

Frequency: Intermittent

Direction: Eastbound

Platoon Population: 25 to 30 vpl

Number of Lanes: 2

SA

Congestion Type: Surveyed Cross Road Signal Queue

Location: SR 155

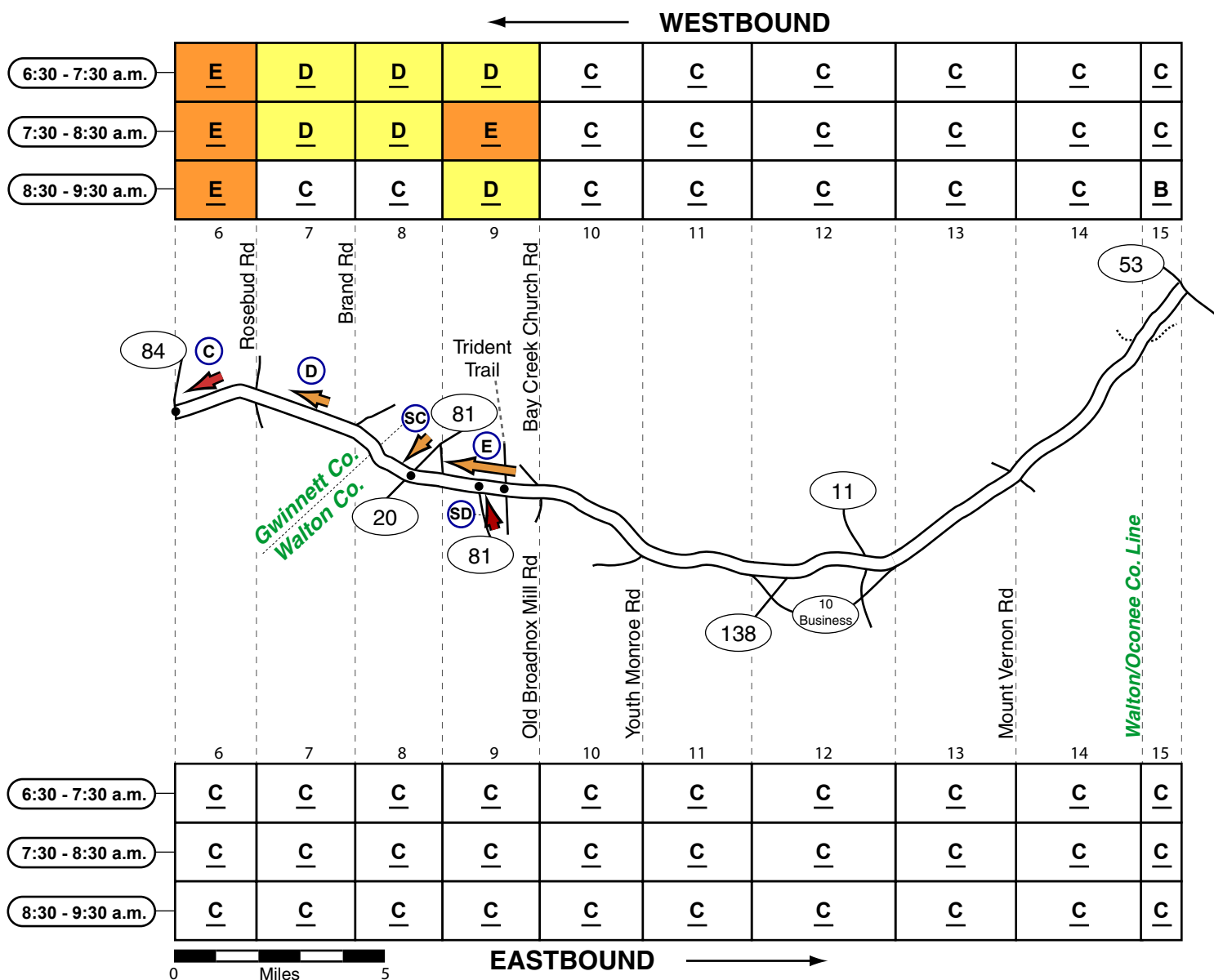
Frequency: Intermittent

Direction: Northbound

Queue Population: 20 to 25 vpl

Number of Lanes: 1

SR 10 (Gwinnett & Walton Counties) - Morning



C
Congestion Type: Mainline Signal Queue / Platoons
Location: SR 84
Frequency: Most Observations
Direction: Westbound
Queue Population: 20 to 40 vpl
Number of Lanes: 2

D
Congestion Type: Platoons
Location: Between Brand Rd & Rosebud Rd
Frequency: Intermittent
Direction: Westbound
Platoon Population: 25 to 35 vpl
Number of Lanes: 2

E
Congestion Type: Platoons
Location: Between Bay Creek Church Rd and SR 81
Frequency: Peak Hour
Direction: Westbound
Platoon Population: 25 to 30 vpl
Number of Lanes: 2
Note: During one observation, congestion was found approaching the signal at Trident Trail; approximately 25 vehicles per lane (two lanes) were queued at the signal.

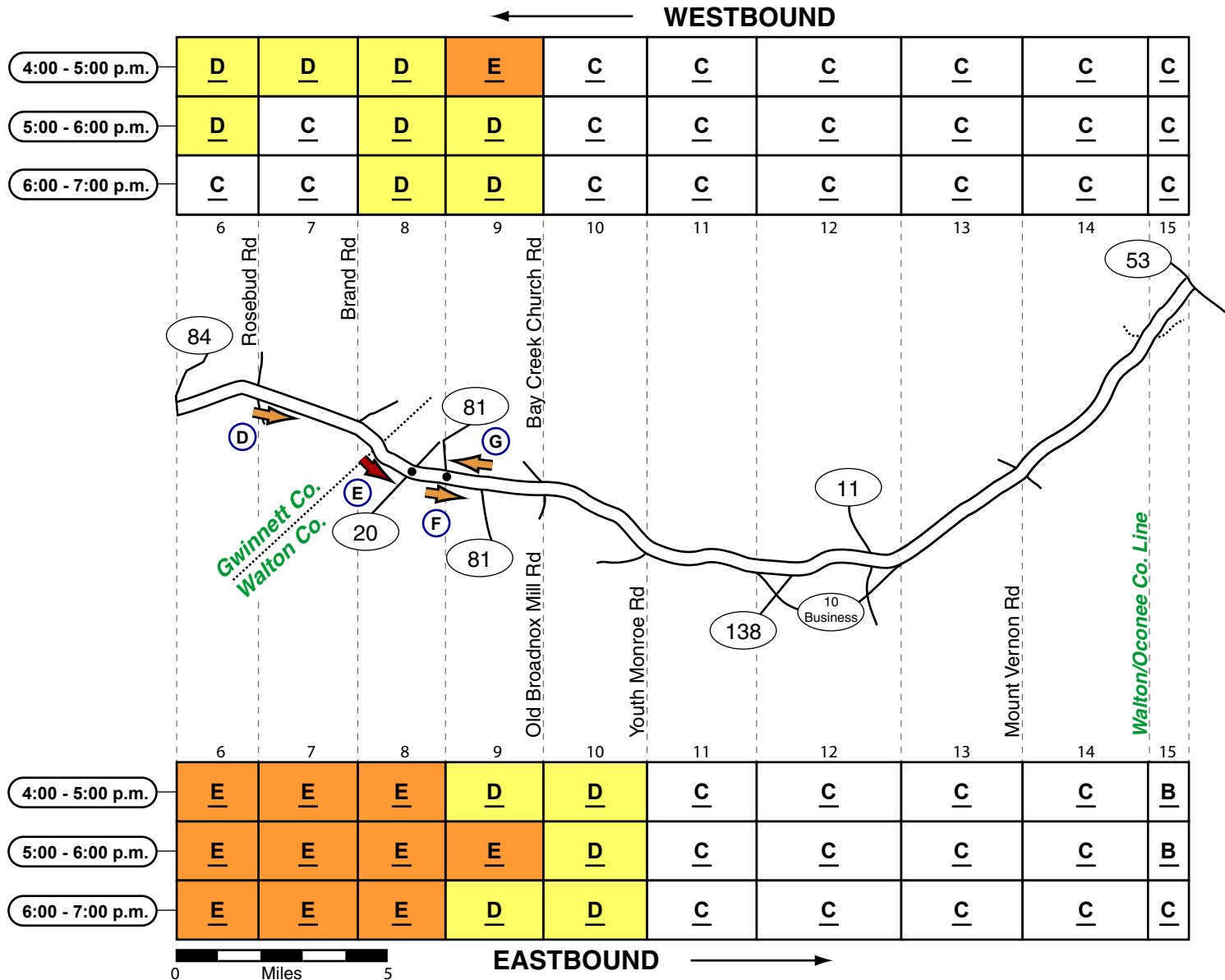
SC
Congestion Type: Surveyed Cross Road Signal Queue
Location: SR 20
Frequency: Intermittent
Direction: Southbound
Queue Population: 20 to 30 vpl
Number of Lanes: 1

SD
Congestion Type: Surveyed Cross Road Signal Queue
Location: SR 81
Frequency: Peak Hour
Direction: Northbound
Queue Population: 20 to 40 vpl
Number of Lanes: 1

Arterial LOS Legend

| A | B | C | D | E | F |
|------------|-------|----------|-------|-----------|--------|
| Very Light | Light | Moderate | Heavy | Congested | Severe |

SR 10 (Gwinnett & Walton Counties) - Evening



D

Congestion Type: Mainline Signal Queue/Platoons

Location: Rosebud Rd

Frequency: Most Observations

Direction: Eastbound

Queue Population: 20 to 40 vpl

Number of Lanes: 2

Note: During most observations, large platoons were observed in the vicinity of the signal at Rosebud Rd; intermittently, queues of less than 25 vehicles per lane were found at the signal.

E

Congestion Type: Mainline Signal Queue

Location: SR 20

Frequency: Most Observations

Direction: Eastbound

Queue Population: 20 to 60 vpl

Number of Lanes: 2

F

Congestion Type: Platoons

Location: Vicinity of SR 81

Frequency: Intermittent

Direction: Eastbound

Platoon Population: 25 to 30 vpl

Number of Lanes: 2

G

Congestion Type: Mainline Signal Queue

Location: SR 81

Frequency: Intermittent

Direction: Westbound

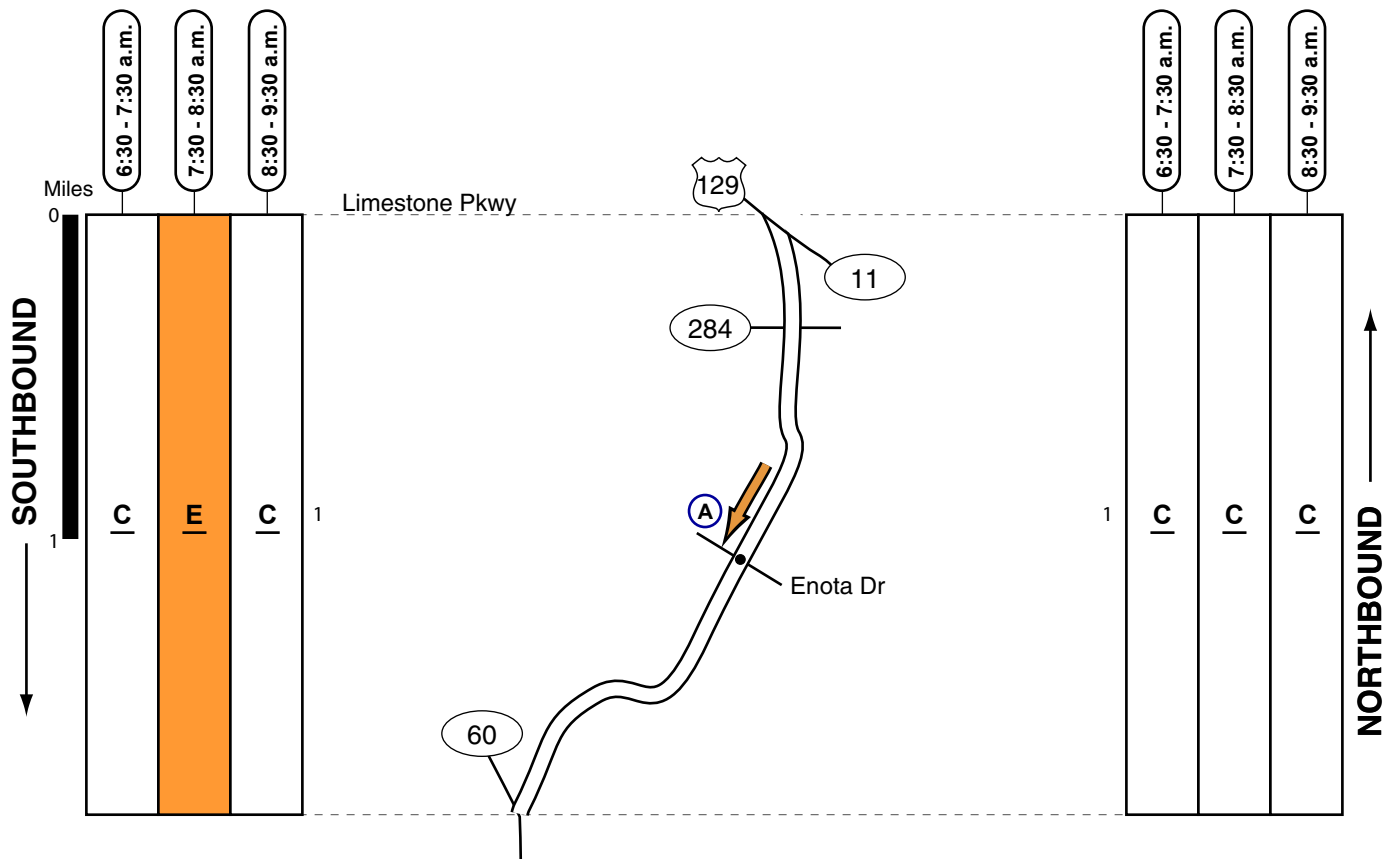
Queue Population: 20 to 30 vpl

Number of Lanes: 2

Arterial LOS Legend

| A | B | C | D | E | F |
|------------|-------|----------|-------|-----------|--------|
| Very Light | Light | Moderate | Heavy | Congested | Severe |

SR 11 BU (Hall County) - Morning



A
 Congestion Type: Mainline Signal Queue
 Location: Enota Dr
 Frequency: One day only
 Direction: Southbound
 Queue Population: 40 to 45 vpl
 Number of Lanes: 1

Arterial LOS Legend

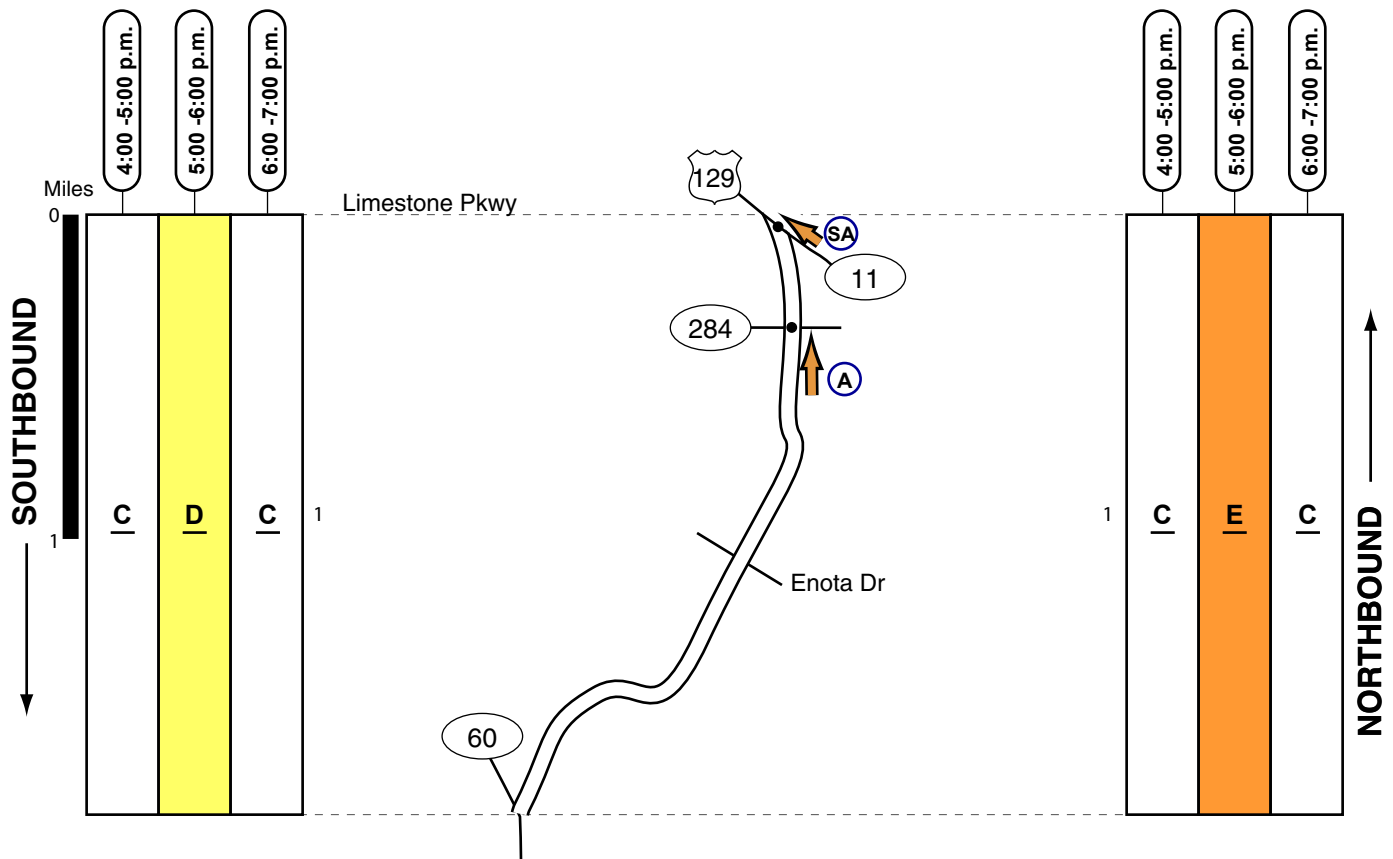
| A | B | C | D | E | F |
|------------|-------|----------|-------|-----------|--------|
| Very Light | Light | Moderate | Heavy | Congested | Severe |

Spring 2010

SR 11 BU (Hall County) - Evening

PERFORMANCE RATINGS

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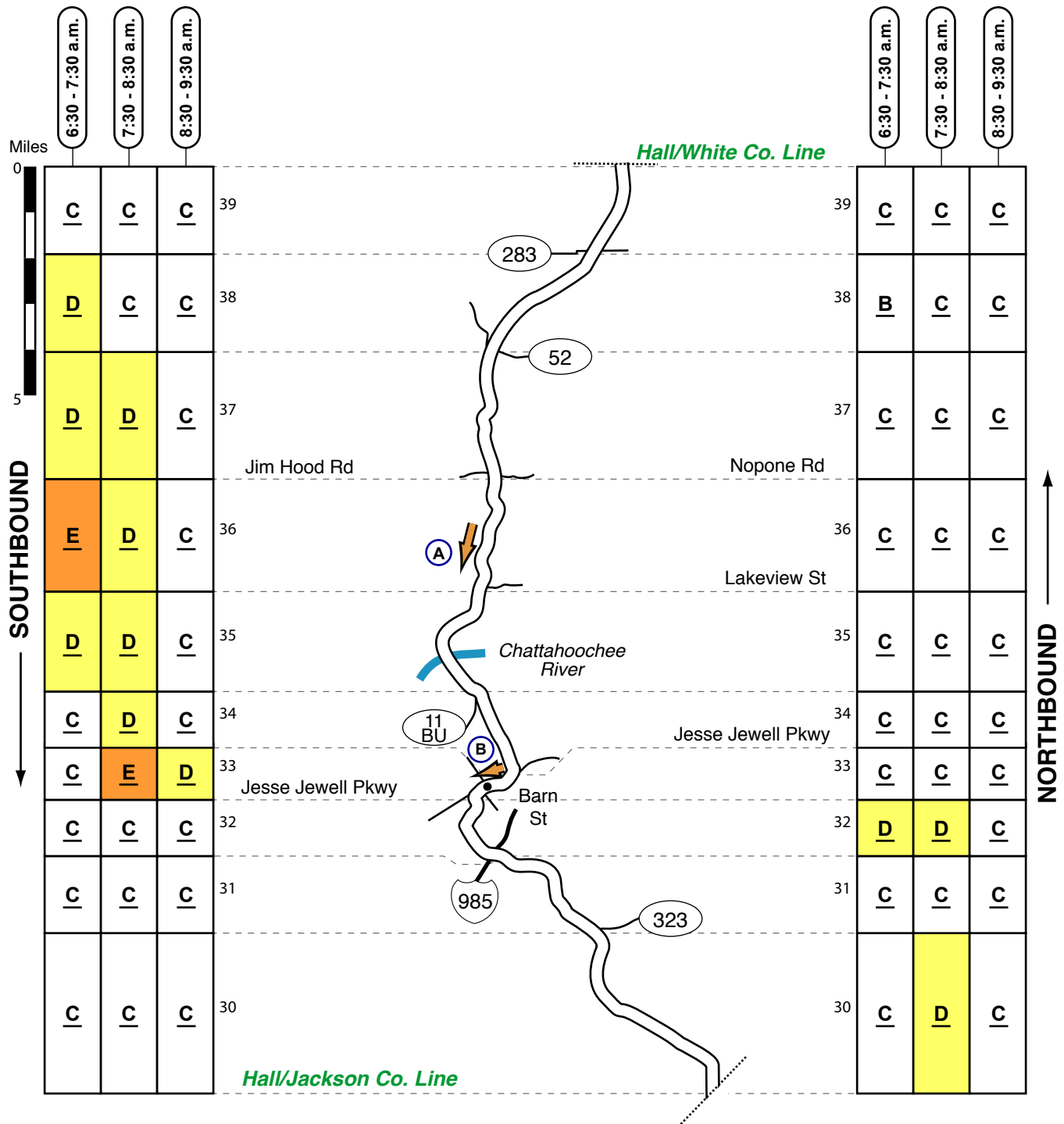


A
 Congestion Type: Mainline Signal Queue
 Location: SR 284
 Frequency: Intermittent
 Direction: Northbound
 Population: 20 to 30 vpl
 Number of Lanes: 1
 Note: During one observation (May 19th @ 5:19 p.m.), approximately 70 vehicles were queued at the signal.

SA
 Congestion Type: Surveyed Cross Road Signal Queue
 Location: SR 11
 Frequency: One time only
 Direction: Northbound
 Queue Population: 30 to 35 vpl
 Number of Lanes: 1

Arterial LOS Legend

| A | B | C | D | E | F |
|------------|-------|----------|-------|-----------|--------|
| Very Light | Light | Moderate | Heavy | Congested | Severe |

Spring/Fall 2010
SR 11 (Hall County) - Morning

A
 Congestion Type: Platoons
 Location: Between Jim Hood Rd & Lakeview St
 Frequency: Intermittent
 Direction: Southbound
 Platoon Population: 25 to 35 vpl
 Number of Lanes: 1

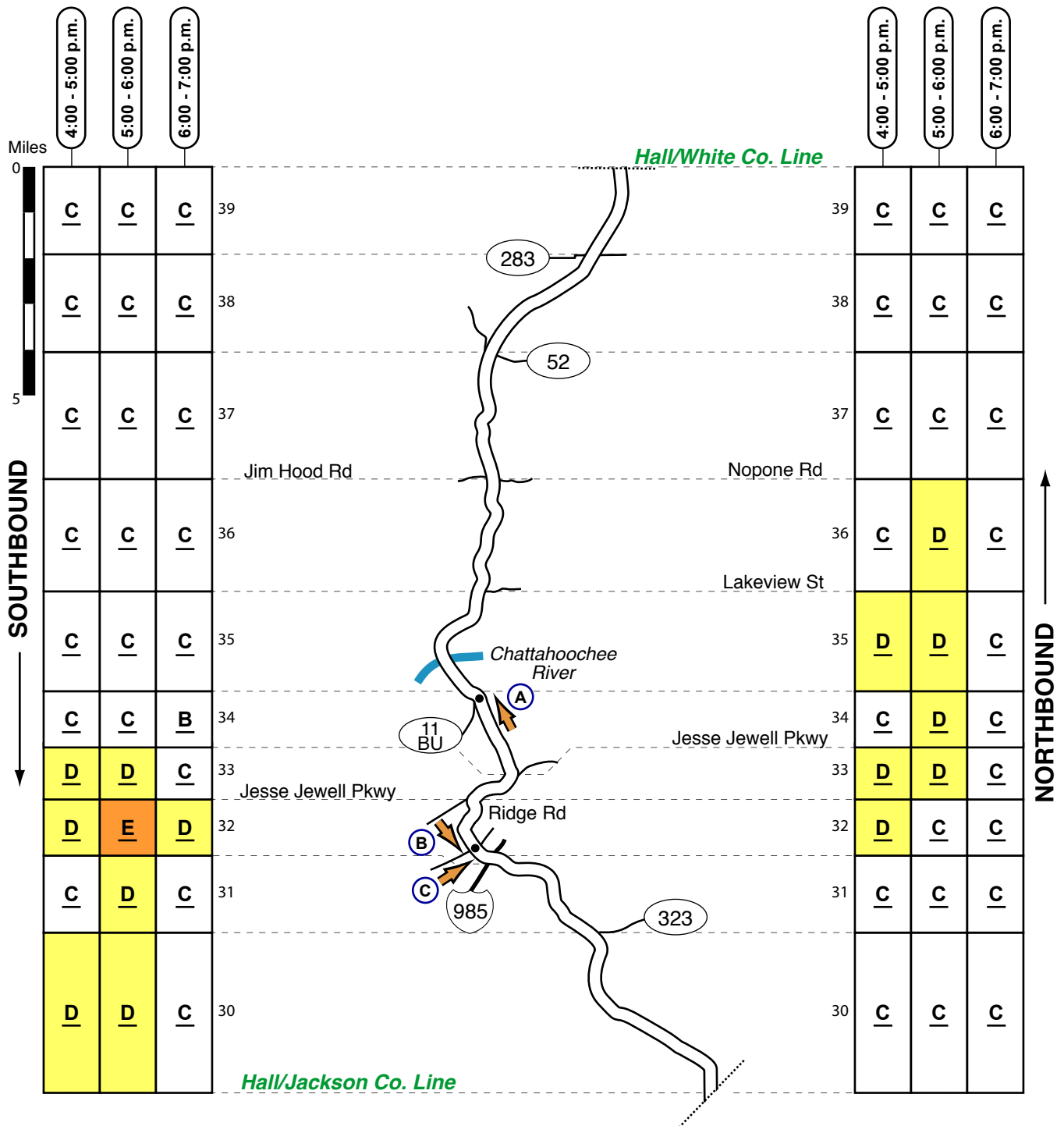
B
 Congestion Type: Mainline Signal Queue
 Location: Barn St
 Frequency: Intermittent
 Direction: Southbound
 Queue Population: 20 to 30 vpl
 Number of Lanes: 2

Spring/Fall 2010

SR 11 (Hall County) - Evening

PERFORMANCE RATINGS

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A
 Congestion Type: Mainline Signal Queue
 Location: SR 11 Business
 Frequency: One time only
 Direction: Northbound
 Queue Population: 30 to 35 vpl
 Number of Lanes: 1

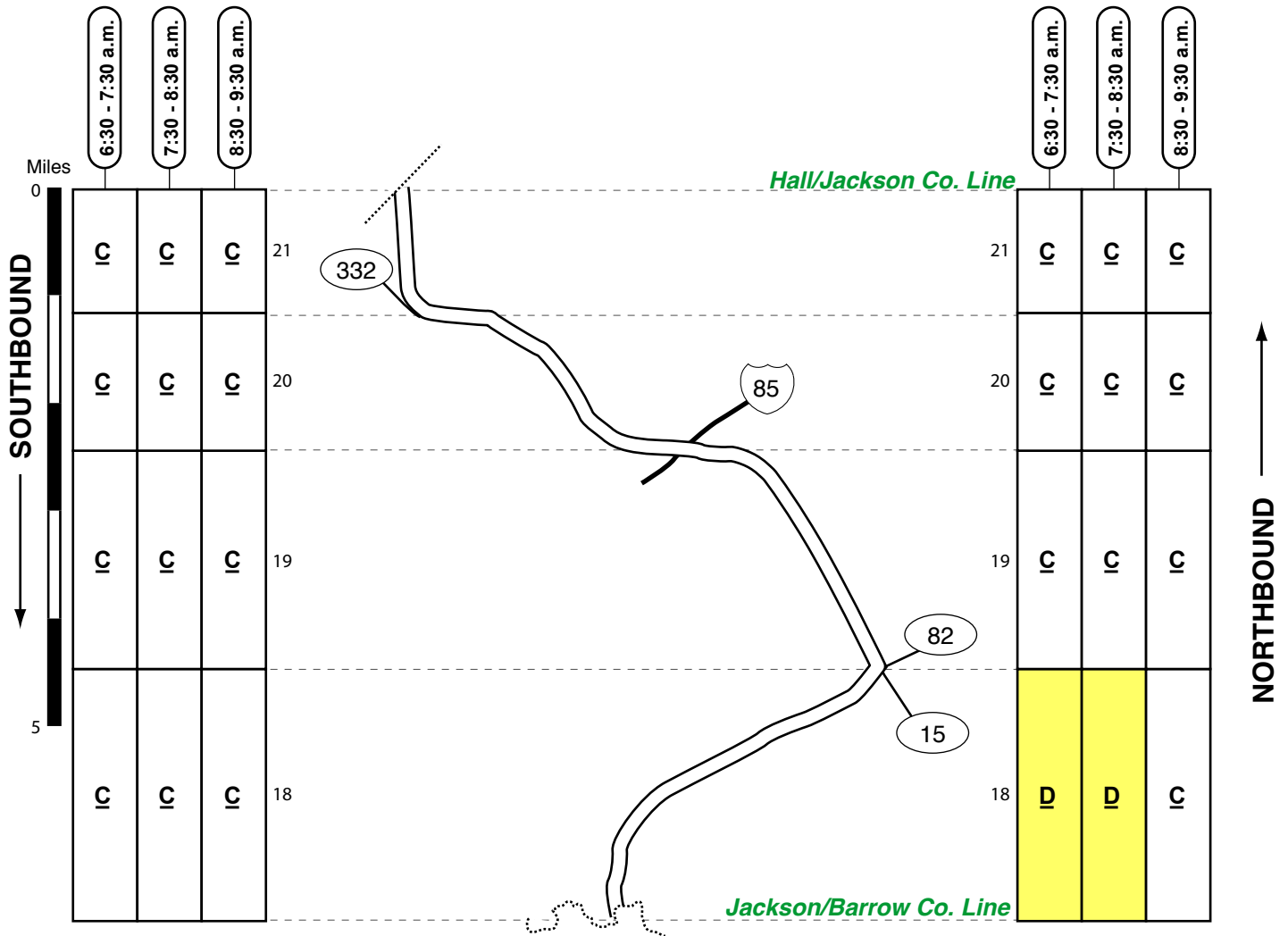
B
 Congestion Type: Mainline Signal Queue
 Location: Ridge Rd
 Frequency: Intermittent
 Direction: Southbound
 Queue Population: 25 to 35 vpl
 Number of Lanes: 2

C
 Congestion Type: Cross Road Signal Queue
 Location: Ridge Rd
 Frequency: Intermittent
 Direction: Eastbound
 Queue Population: 20 to 30 vpl
 Number of Lanes: 1

Arterial LOS Legend

| A | B | C | D | E | F |
|------------|-------|----------|-------|-----------|--------|
| Very Light | Light | Moderate | Heavy | Congested | Severe |

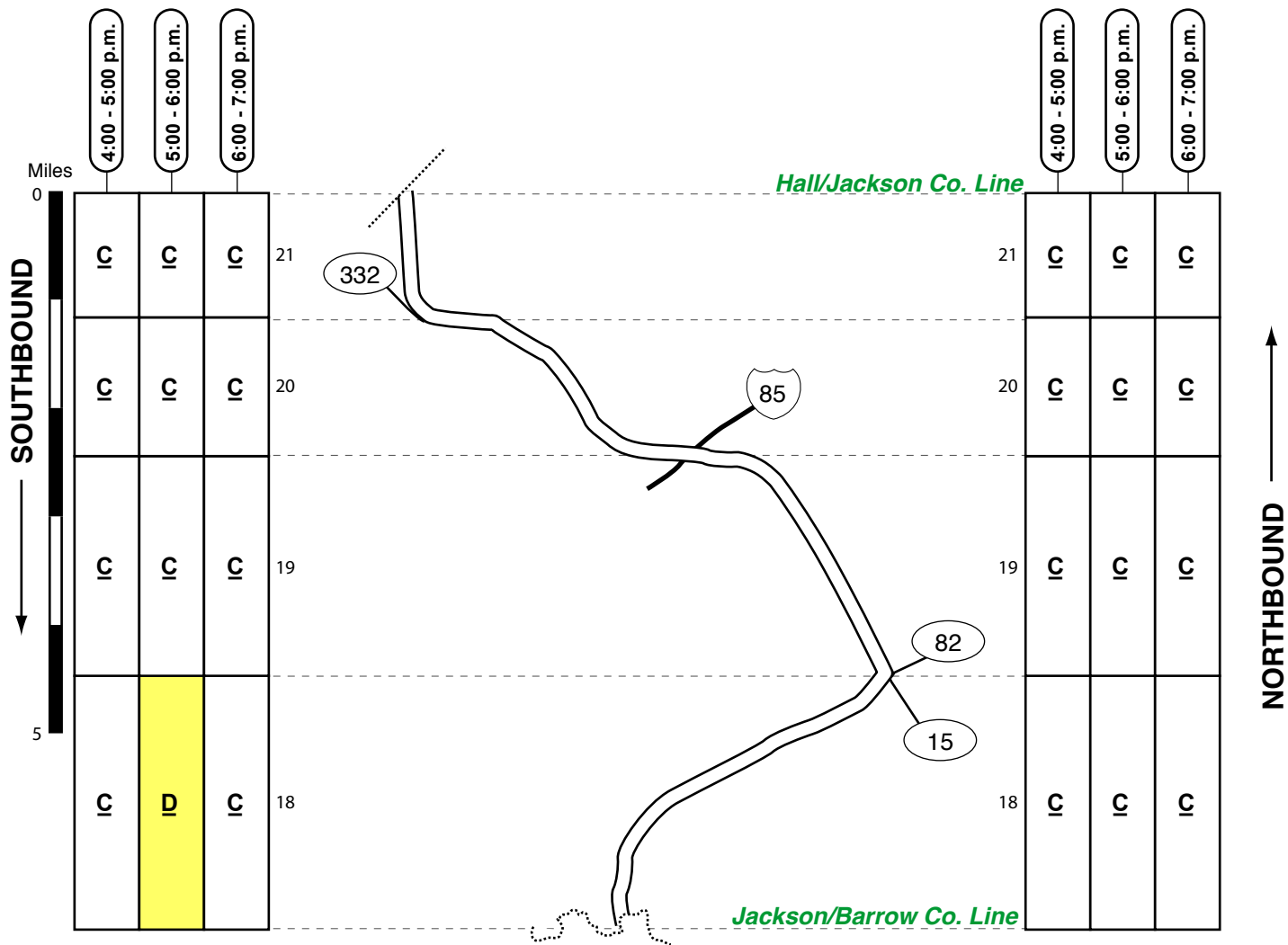
SR 11 (Jackson County) - Morning



Spring/Fall 2010

SR 11 (Jackson County) - Evening

PERFORMANCE RATINGS

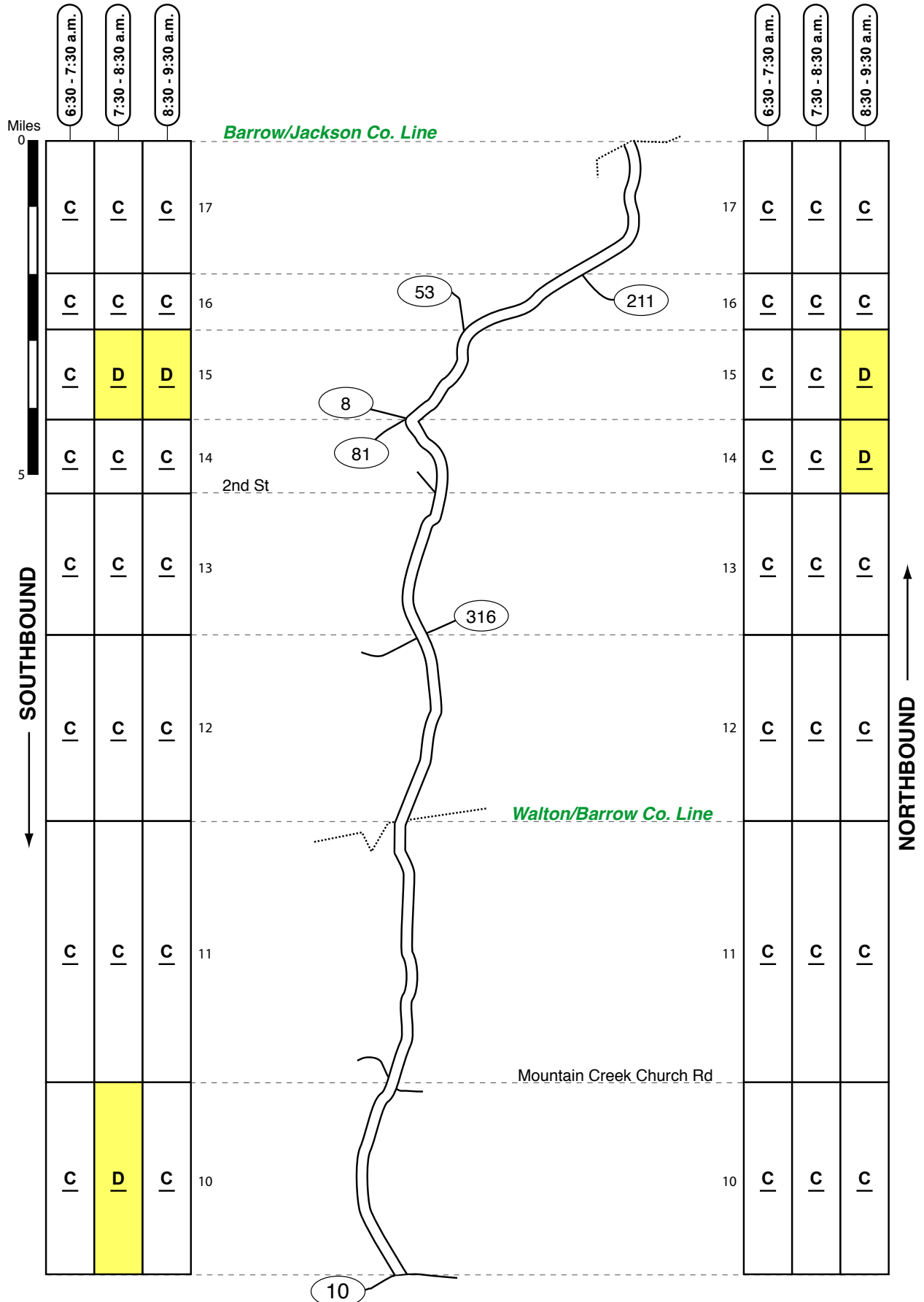


Arterial LOS Legend

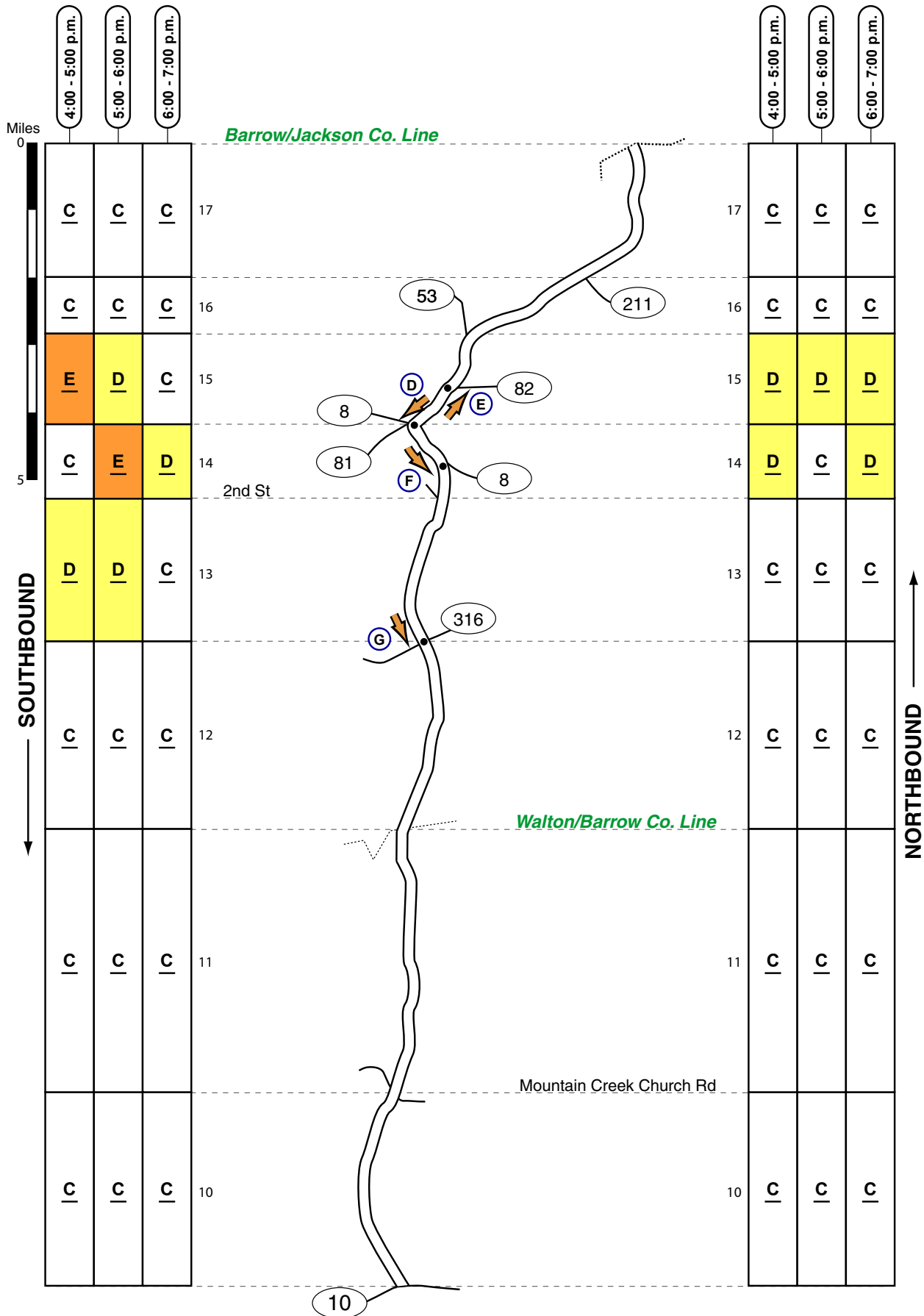
| | | | | | |
|------------|----------|----------|----------|-----------|----------|
| A | B | C | D | E | F |
| Very Light | Light | Moderate | Heavy | Congested | Severe |

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SR 11 (Barrow/Walton & Newton Counties) - Morning



SR 11 (Barrow/Walton & Newton Counties) - Evening



SR 11 (Barrow/Walton & Newton Counties) - Evening

D

Congestion Type: Mainline Signal Queue
Location: SR 8
Frequency: Intermittent
Direction: Southbound
Queue Population: 20 to 25 vpl
Number of Lanes: 1

E

Congestion Type: Mainline Signal Queue/Platoons
Location: SR 82 (Broad St)
Frequency: Intermittent
Direction: Northbound
Queue Population: 20 to 30 vpl
Number of Lanes: 1

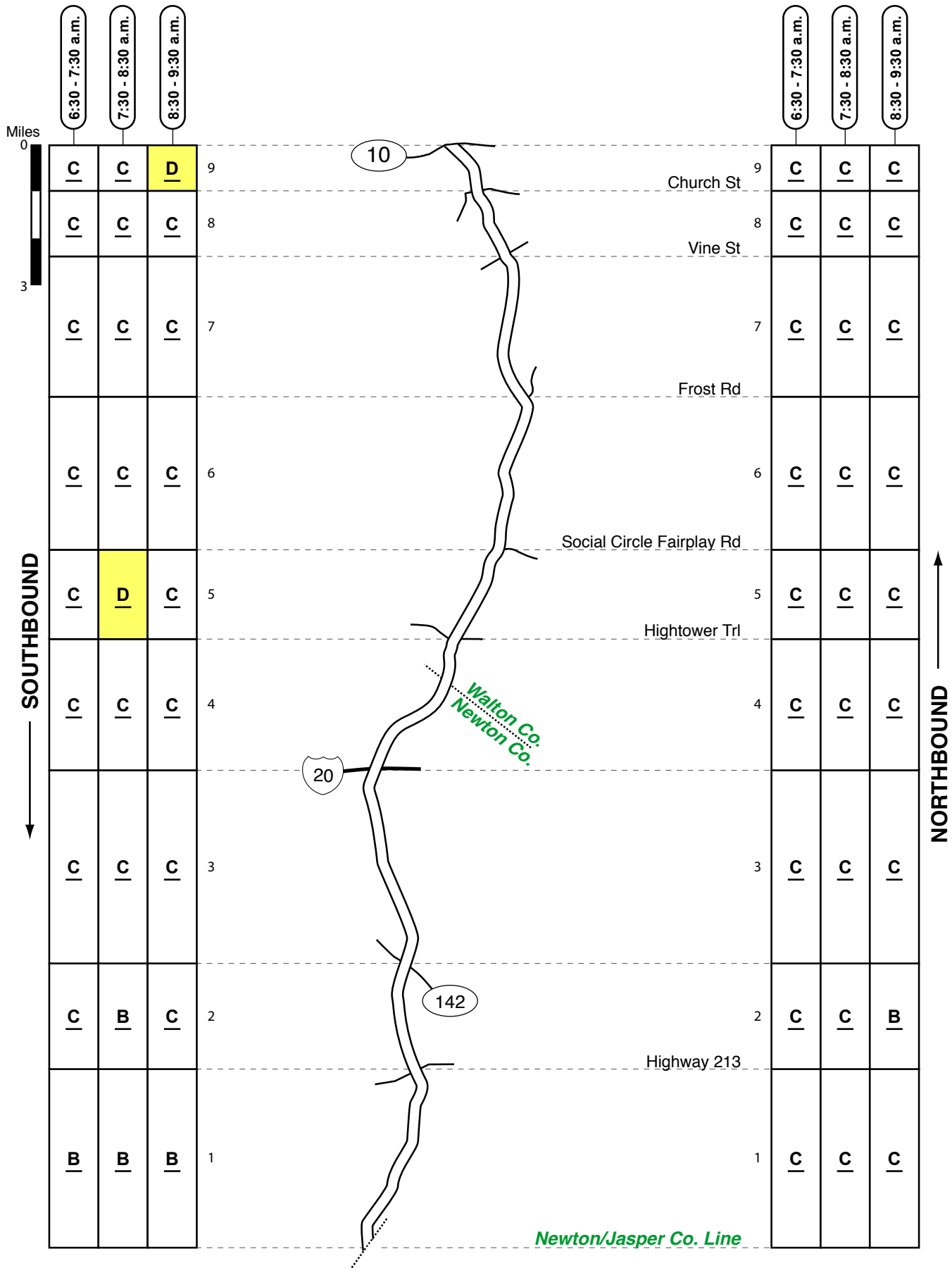
F

Congestion Type: Mainline Signal Queue
Location: SR 8
Frequency: Intermittent
Direction: Southbound
Queue Population: 20 to 30 vpl
Number of Lanes: 1

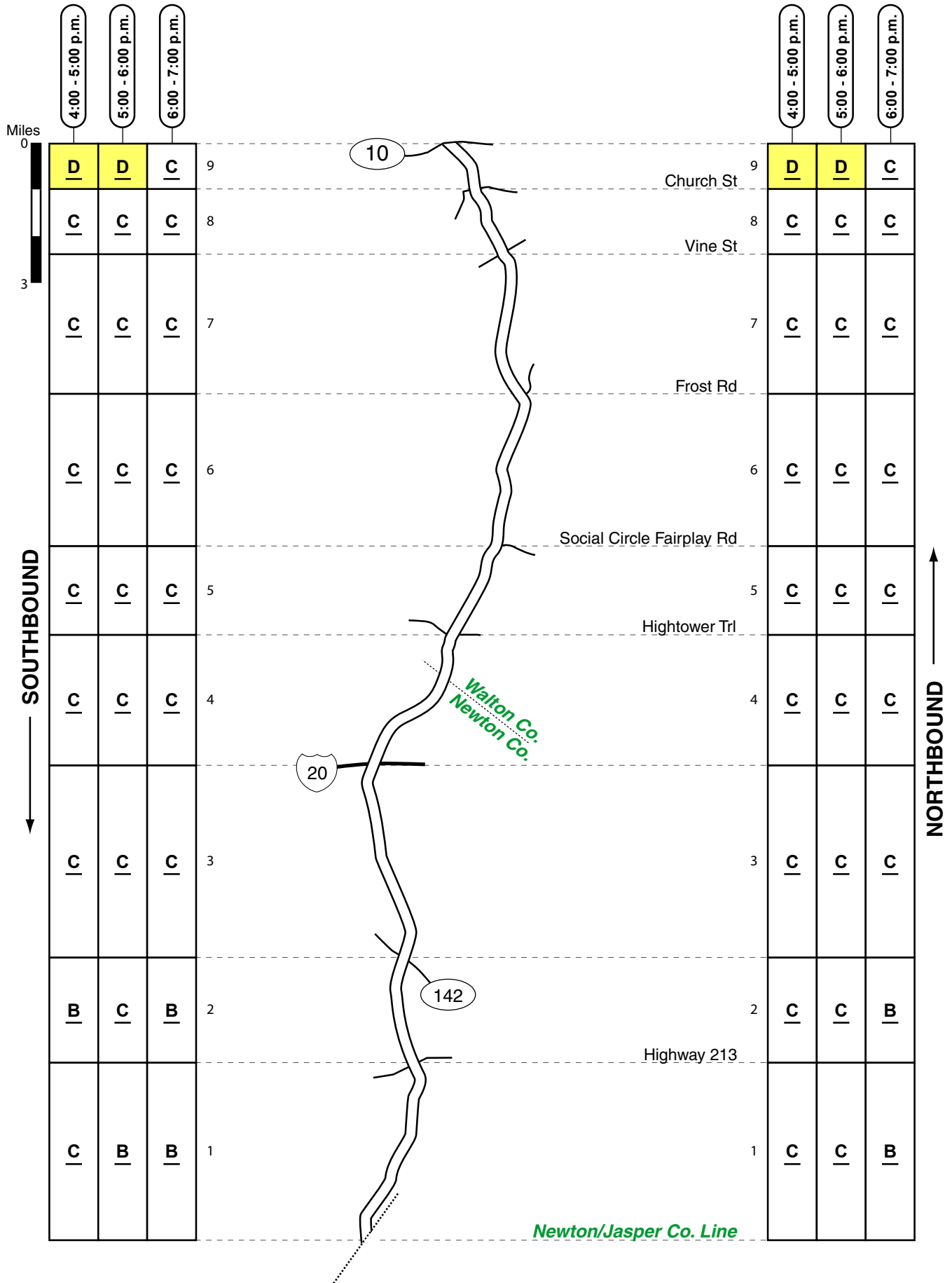
G

Congestion Type: Mainline Signal Queue
Location: SR 316
Frequency: Intermittent
Direction: Southbound
Queue Population: 20 to 25 vpl
Number of Lanes: 1

SR 11 (Barrow/Walton & Newton Counties) - Morning



SR 11 (Barrow/Walton & Newton Counties) - Evening



Arterial LOS Legend

A

Very Light

B

Light

C

Moderate

D

Heavy

E

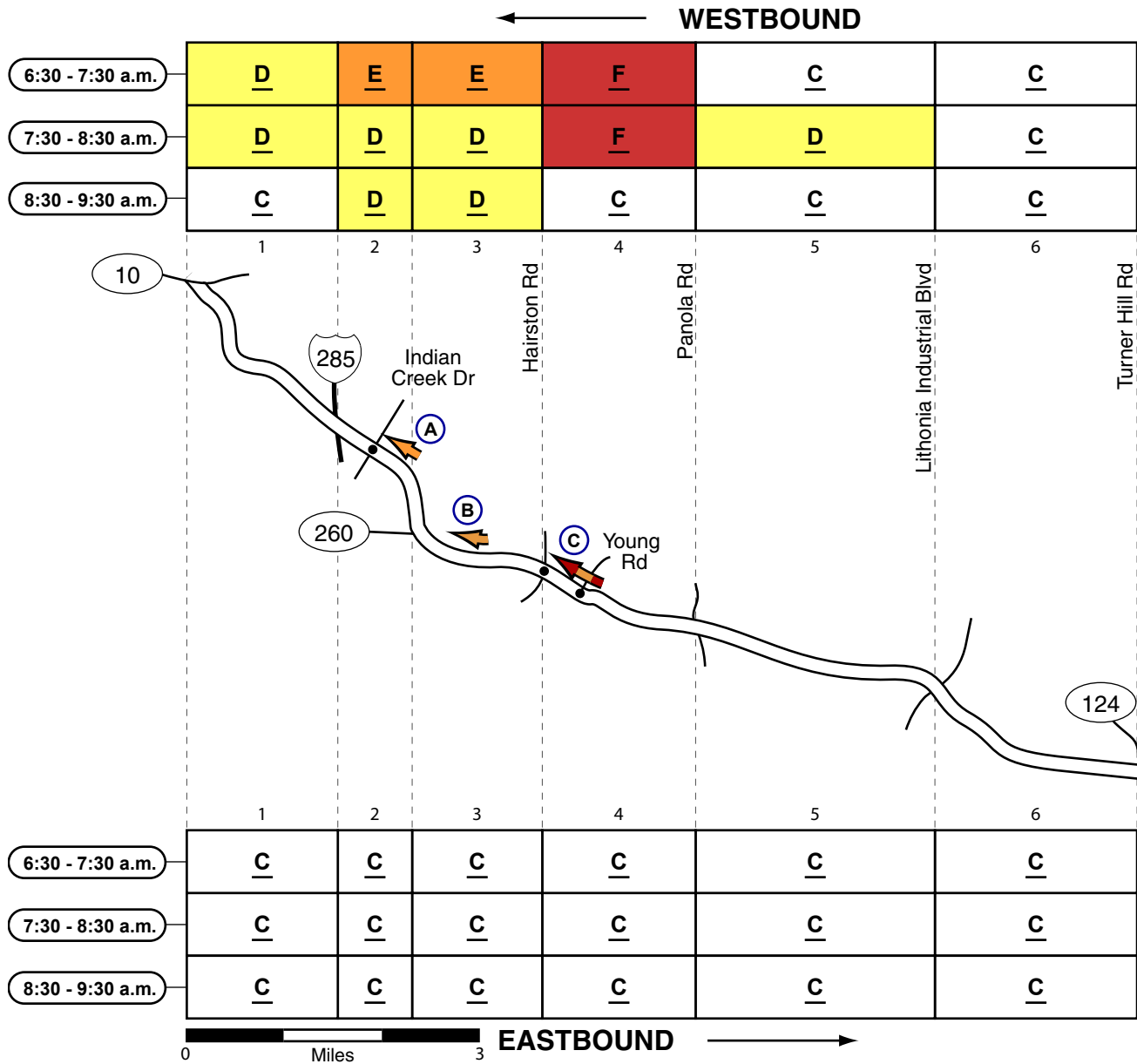
Congested

F

Severe

Spring 2010

SR 12 (DeKalb County) - Morning



Arterial LOS Legend

| | | | | | |
|------------|----------|----------|----------|-----------|----------|
| <u>A</u> | <u>B</u> | <u>C</u> | <u>D</u> | <u>E</u> | <u>F</u> |
| Very Light | Light | Moderate | Heavy | Congested | Severe |

SR 12 (DeKalb County) - Morning

A

Congestion Type: Mainline Signal Queue

Location: Indian Creek Dr

Frequency: Intermittent

Direction: Westbound

Queue Population: 20 to 30 vpl

Number of Lanes: 2

B

Congestion Type: Platoons

Location: Between Hairston Rd & SR 260

Frequency: Intermittent

Direction: Westbound

Platoon Population: 25 to 35 vpl

Number of Lanes: 2

C

Congestion Type: Mainline Signal Queue

Location: Hairston Rd

Frequency: Peak Hour

Direction: Westbound

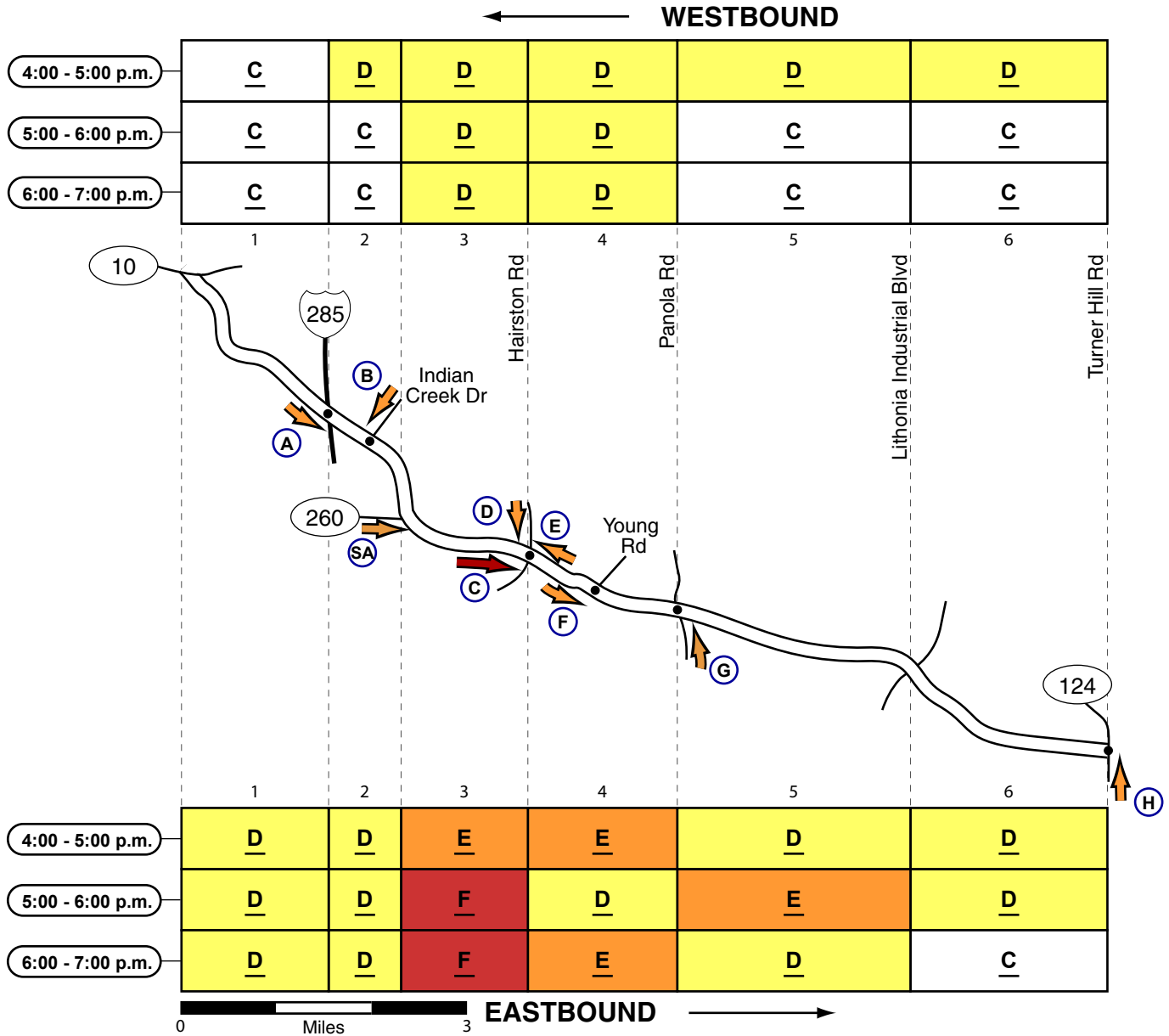
Queue Population: 20 to 60 vpl

Number of Lanes: 2

Note: On some days but not others, congestion backed through the upstream signal at Young Rd.

Spring 2010

SR 12 (DeKalb County) - Evening



Arterial LOS Legend

| | | | | | |
|------------|----------|----------|----------|-----------|----------|
| <u>A</u> | <u>B</u> | <u>C</u> | <u>D</u> | <u>E</u> | <u>F</u> |
| Very Light | Light | Moderate | Heavy | Congested | Severe |

SR 12 (DeKalb County) - Evening

A

Congestion Type: Mainline Signal Queue
Location: I-285
Frequency: Intermittent
Direction: Eastbound
Queue Population: 20 to 25 vpl
Number of Lanes: 2

B

Congestion Type: Cross Road Signal Queue
Location: Indian Creek Dr
Frequency: Intermittent
Direction: Southbound
Queue Population: 20 to 40 vpl
Number of Lanes: 1

C

Congestion Type: Mainline Signal Queue
Location: Hairston Rd
Frequency: Most Observations
Direction: Eastbound
Queue Population: 20 to 60 vpl
Number of Lanes: 2

D

Congestion Type: Cross Road Signal Queue
Location: Hairston Rd
Frequency: Intermittent
Direction: Southbound
Queue Population: 20 to 30 vpl
Number of Lanes: 2

E

Congestion Type: Mainline Signal Queue
Location: Hairston Rd
Frequency: Intermittent
Direction: Westbound
Queue Population: 20 to 30 vpl
Number of Lanes: 2

F

Congestion Type: Mainline Signal Queue
Location: Young Rd
Frequency: Intermittent
Direction: Eastbound
Queue Population: 20 to 30 vpl
Number of Lanes: 1

G

Congestion Type: Cross Road Signal Queue
Location: Panola Rd
Frequency: Intermittent
Direction: Northbound
Queue Population: 20 to 25 vpl
Number of Lanes: 2

H

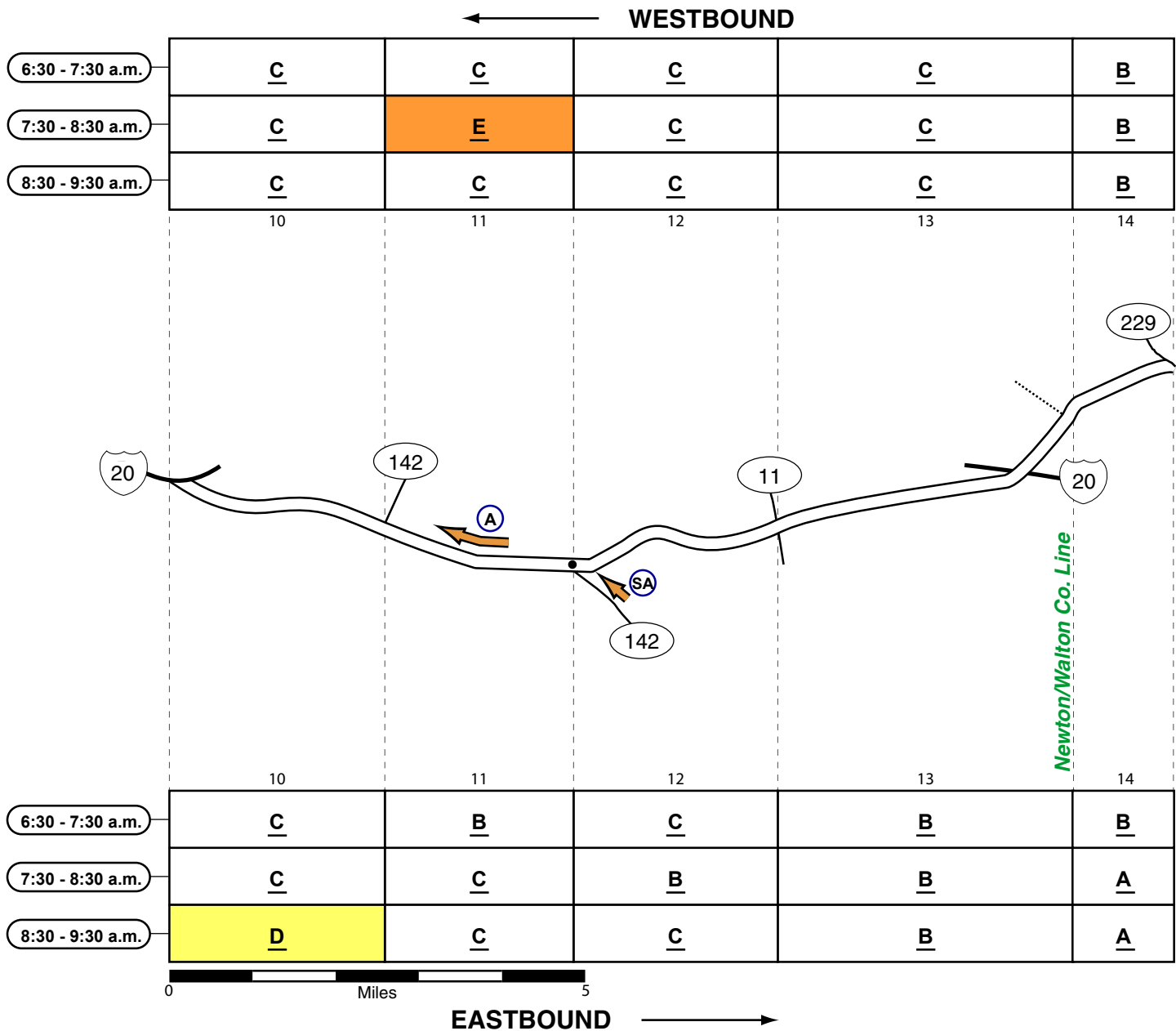
Congestion Type: Cross Road Signal Queue
Location: SR 124 (Turner Hill Rd)
Frequency: Intermittent
Direction: Northbound
Queue Population: 20 to 30 vpl
Number of Lanes: 2

SA

Congestion Type: Surved Cross Road Queue
Location: SR 260
Frequency: Intermittent
Direction: Eastbound
Queue Population: 20 to 30 vpl
Number of Lanes: 1

Note: When congested, vehicles were queued in the right lane on SR 260 approaching SR 12 (no signal for right-turning vehicles).

SR 12 (Newton County) - Morning



A

Congestion Type: Platoons

Location: Between SR 142 (Hwy 142) & SR 142 (John Williams Hwy)

Frequency: Intermittent

Direction: Westbound

Platoon Population: 25 to 30 vpl

Number of Lanes: 1

SA

Congestion Type: Surveyed Cross Road Signal Queue

Location: SR 142

Frequency: Intermittent

Direction: Northbound

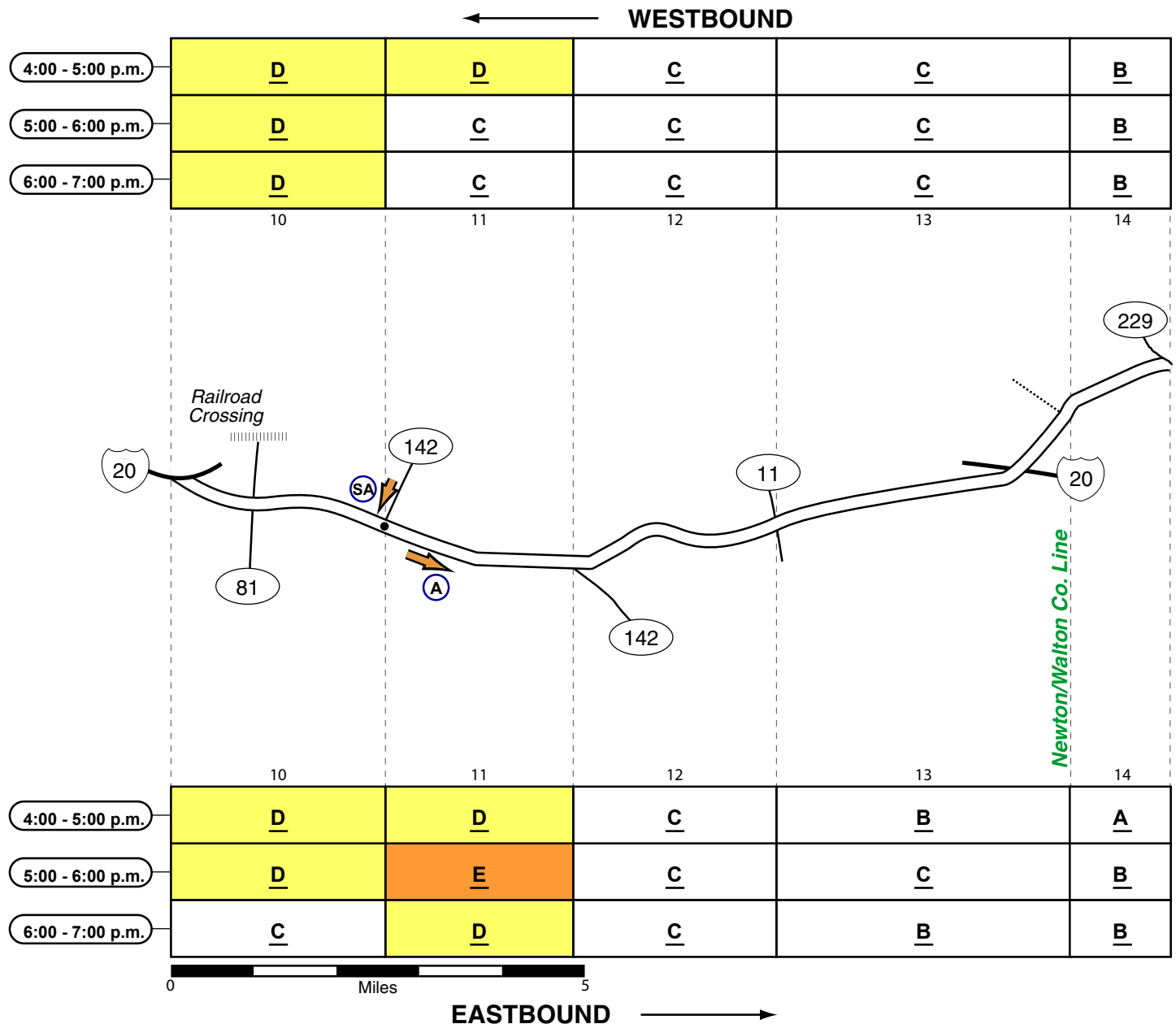
Queue Population: 20 to 30 vpl

Number of Lanes: 1

Arterial LOS Legend

| <u>A</u> | <u>B</u> | <u>C</u> | <u>D</u> | <u>E</u> | <u>F</u> |
|------------|----------|----------|----------|-----------|----------|
| Very Light | Light | Moderate | Heavy | Congested | Severe |

Spring 2010 SR 12 (Newton County) - Evening



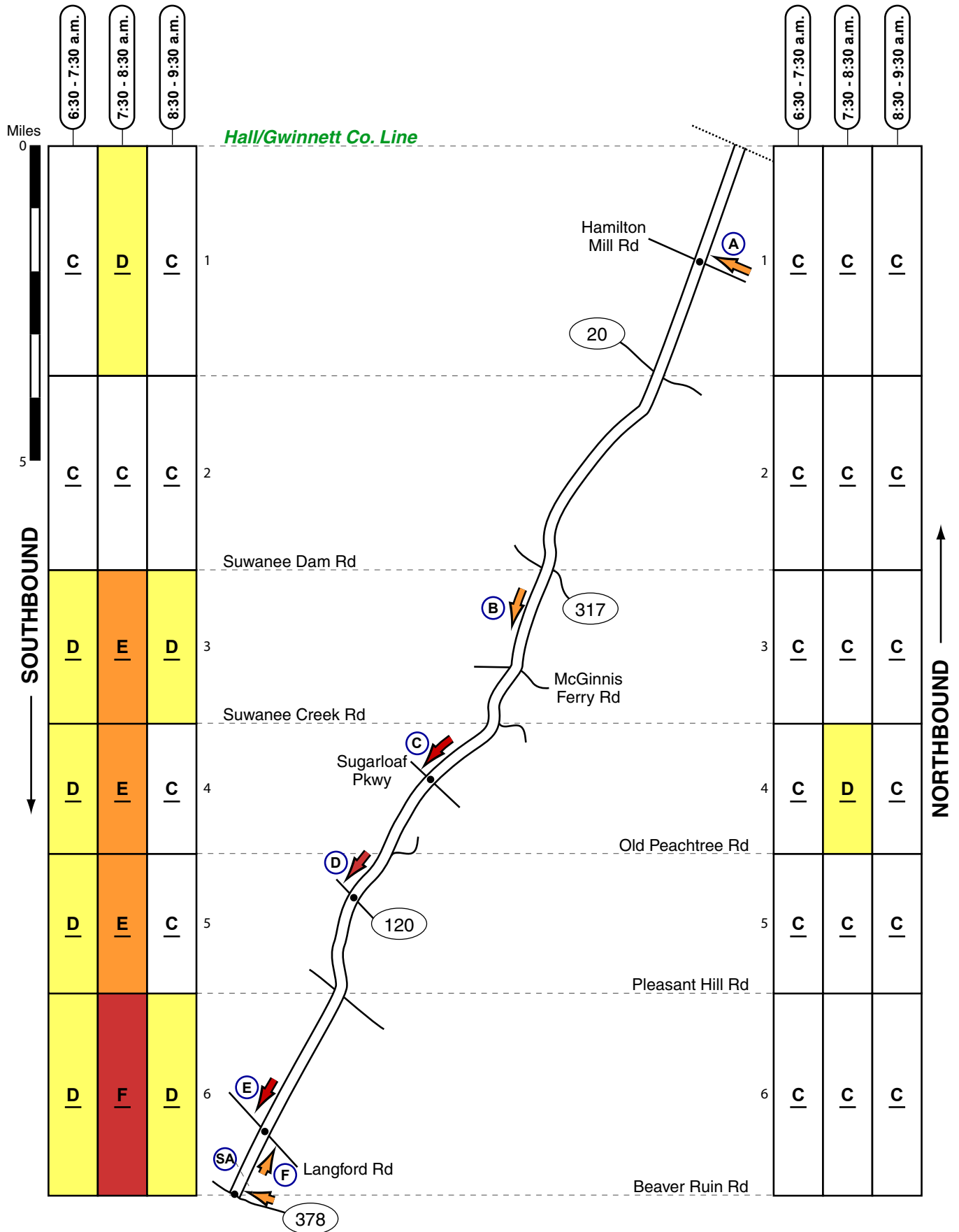
A
Congestion Type: Platoons
Location: SR 142 (John Williams Hwy) & SR 142 (Hwy 142)
Frequency: Intermittent
Direction: Eastbound
Platoon Population: 25 to 30 vpl
Number of Lanes: 1

SA
Congestion Type: Surveyed Cross Road Signal Queue
Location: SR 142
Frequency: Intermittent
Direction: Southbound
Queue Population: 20 to 40 vpl
Number of Lanes: 1

Arterial LOS Legend

| <u>A</u> | <u>B</u> | <u>C</u> | <u>D</u> | <u>E</u> | <u>F</u> |
|------------|----------|----------|----------|-----------|----------|
| Very Light | Light | Moderate | Heavy | Congested | Severe |

SR 13 (Gwinnett County) - Morning



SR 13 (Gwinnett County) - Morning

A

Congestion Type: Cross Road Signal Queue
Location: Hamilton Mill Rd
Frequency: Intermittent
Direction: Westbound
Queue Population: 20 to 25 vpl
Number of Lanes: 2

B

Congestion Type: Platoons
Location: Between SR 317 and Suwanee Creek Rd
Frequency: Intermittent
Direction: Southbound
Platoon Population: 25 to 35 vpl
Number of Lanes: 1

C

Congestion Type: Mainline Signal Queue
Location: Sugarloaf Pkwy
Frequency: Peak Hour
Direction: Southbound
Queue Population: 20 to 50 vpl
Number of Lanes: 1

D

Congestion Type: Mainline Signal Queue
Location: SR 120
Frequency: Peak Hour
Direction: Southbound
Queue Population: 25 to 35 vpl
Number of Lanes: 2

E

Congestion Type: Mainline Signal Queue
Location: Langford Rd
Frequency: Peak Hour
Direction: Southbound
Queue Population: 30 to 60 vpl
Number of Lanes: 2

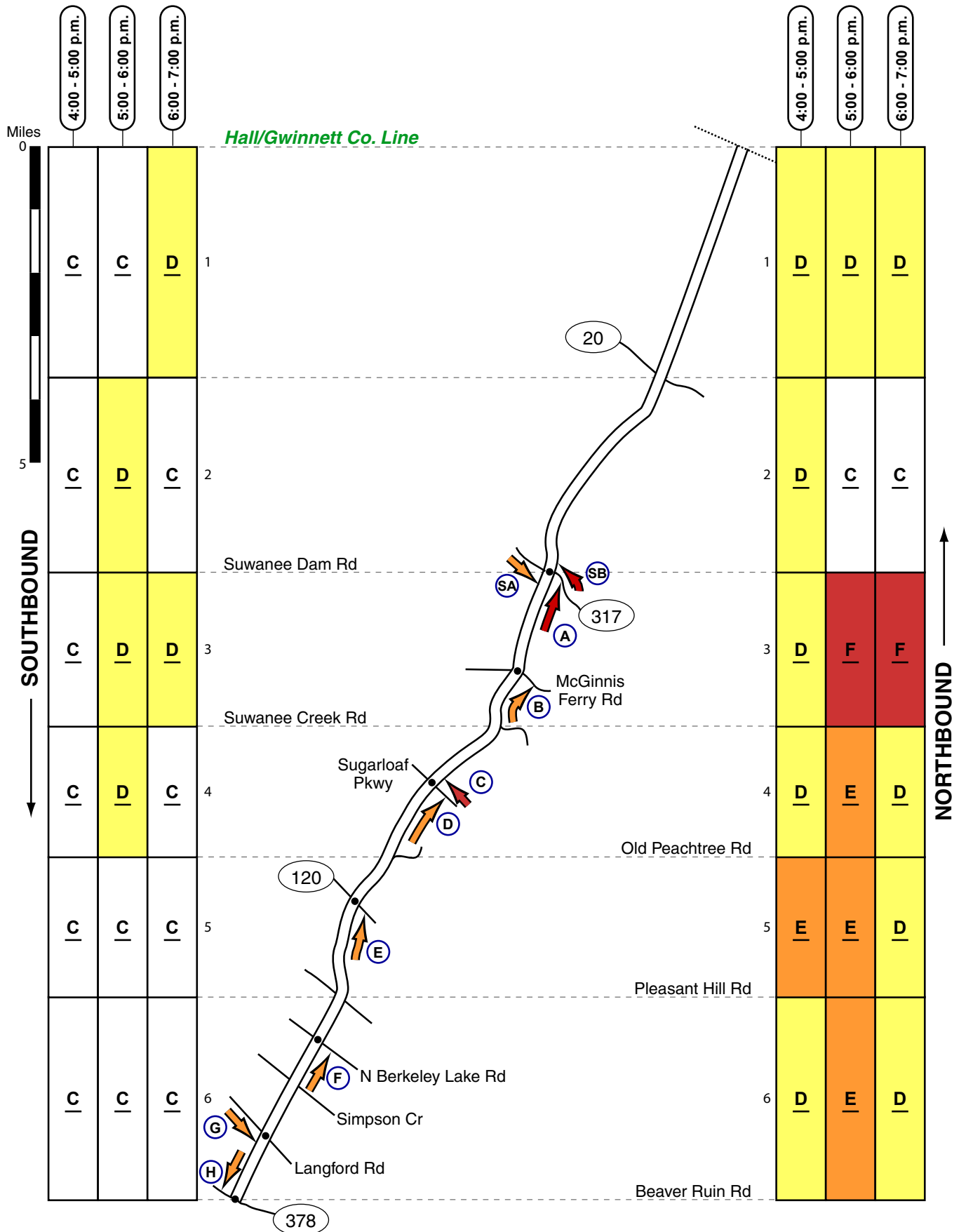
F

Congestion Type: Left-Turn Queue
Location: Langford Rd
Frequency: Intermittent
Direction: Northbound
Queue Population: 25 to 30 vpl
Number of Lanes: 2

SA

Congestion Type: Surveyed Cross Road Signal Queue
Location: SR 378
Frequency: Intermittent
Direction: Westbound
Queue Population: 20 to 30 vpl
Number of Lanes: 2

SR 13 (Gwinnett County) - Evening



SR 13 (Gwinnett County) - Evening

A

Congestion Type: Mainline Signal Queue
Location: SR 317
Frequency: Peak Hour
Direction: Northbound
Queue Population: 45 to 65 vpl
Number of Lanes: 1
Note: The head of the queue was found at one of the two closely spaced signals at Town Center Ave and SR 317.

B

Congestion Type: Mainline Signal Queue
Location: McGinnis Ferry Rd
Frequency: Intermittent
Direction: Northbound
Queue Population: 25 to 35 vpl
Number of Lanes: 1
Note: During one observation, approximately 100 vehicles were queued at the signal.

C

Congestion Type: Cross Road Signal Queue
Location: Sugarloaf Parkway
Frequency: Most observations after 5:00 p.m.
Direction: Westbound
Queue Population: 20 to 50 vpl
Number of Lanes: 2

D

Congestion Type: Platoons
Location: Between Old Peachtree Rd and Suwanee Creek Rd
Frequency: Intermittent
Direction: Northbound
Platoon Population: 25 to 40 vpl
Number of Lanes: 1

E

Congestion Type: Mainline Signal Queue
Location: SR 120
Frequency: Intermittent
Direction: Northbound
Queue Population: 20 to 25 vpl
Number of Lanes: 2

F

Congestion Type: Mainline Signal Queue
Location: Berkeley Lake Rd
Frequency: Intermittent
Direction: Northbound
Queue Population: 20 to 30 vpl
Number of Lanes: 2

G

Congestion Type: Cross Road Signal Queue
Location: Langford Rd
Frequency: Intermittent
Direction: Eastbound
Queue Population: 25 to 35 vpl
Number of Lanes: 2

H

Congestion Type: Left-Turn Queue
Location: SR 378
Frequency: Intermittent
Direction: Southbound
Queue Population: 20 to 45 vpl
Number of Lanes: 2
Note: Intermittently, congestion in the left-turn bay extended back into the left lane on SR 13.

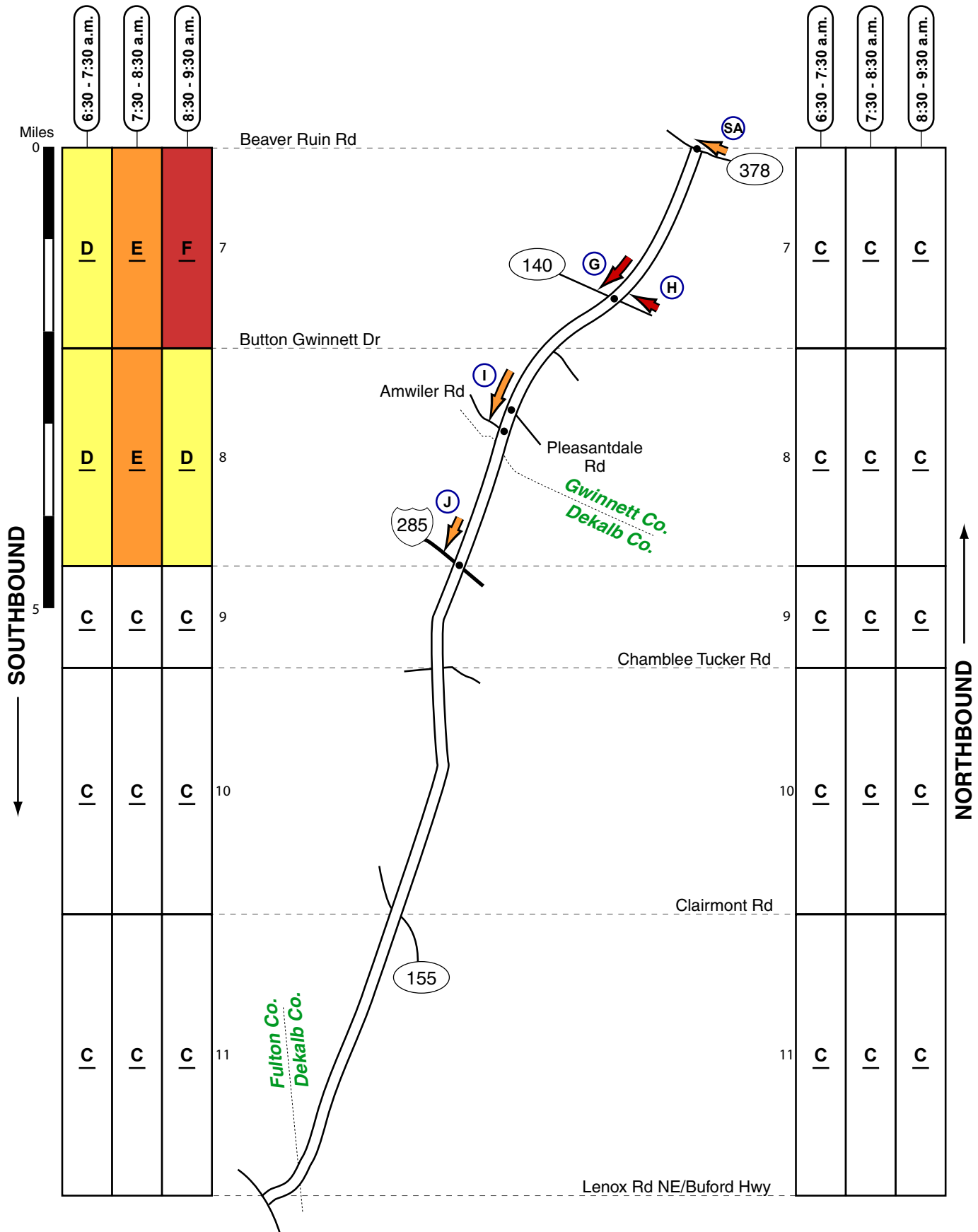
SA

Congestion Type: Surveyed Cross Road Signal Queue
Location: SR 317
Frequency: Intermittent
Direction: Southbound
Queue Population: 20 to 40 vpl
Number of Lanes: 2
Note: The head of the queue was found at the signal at SR 13 or the railroad tracks north of the signal.

SB

Congestion Type: Surveyed Cross Road Signal Queue
Location: SR 317
Frequency: Most observations before 6:00 p.m.
Direction: Northbound
Queue Population: 20 to 40 vpl
Number of Lanes: 2
Note: The head of the queue was typically found at the signal at SR 13. During one observation only, the head of the queue was found at the railroad crossing north of the intersection; the queue approaching the crossing contained approximately 85 vehicles.

SR 13 (Gwinnett/Dekalb & Fulton Counties) - Morning



SR 13 (Gwinnett/Dekalb & Fulton Counties) - Morning

G

Congestion Type: Mainline Signal Queue
Location: SR 140
Frequency: Most Observations
Direction: Southbound
Queue Population: 20 to 50 vpl
Number of Lanes: 2

H

Congestion Type: Cross Road Signal Queue
Location: SR 140
Frequency: Peak Hour
Direction: Westbound
Queue Population: 20 to 30 vpl
Number of Lanes: 2

I

Congestion Type: Mainline Signal Queue
Location: Amwiler Rd / Pleasantdale Rd
Frequency: Intermittent
Direction: Southbound
Queue Population: 20 to 25 vpl
Number of Lanes: 2
Note: During some observations congestion approaching Amwiler Rd extended back through the closely spaced upstream signal (200 yards) at Pleasantdale Rd.

J

Congestion Type: Left-Turn Queue
Location: I-285
Frequency: Intermittent
Direction: Southbound
Queue Population: 20 to 30 vpl
Number of Lanes: 1
Note: Intermittently, congestion in the left-turn lane extended back into the mainline of SR 13.

SA

Congestion Type: Surveyed Cross Road Signal Queue
Location: SR 378
Frequency: Intermittent
Direction: Westbound
Queue Population: 20 to 30 vpl
Number of Lanes: 2



| | | | | | |
|------------|----------|----------|----------|-----------|----------|
| <u>A</u> | <u>B</u> | <u>C</u> | <u>D</u> | <u>E</u> | <u>F</u> |
| Very Light | Light | Moderate | Heavy | Congested | Severe |

SR 13 (Gwinnett/Dekalb & Fulton Counties) - Evening

I

Congestion Type: Mainline Signal Queue

Location: Mitchell St / Cemetery St

Frequency: Peak Hour

Direction: Northbound

Queue Population: 30 to 60 vpl

Number of Lanes: 2

Note: The head of the queue was found at one of the two closely spaced signals at Mitchell Rd and Cemetery St.

J

Congestion Type: Cross Road Signal Queue

Location: Motors Industrial Way

Frequency: Intermittent

Direction: Eastbound

Queue Population: 20 to 40 vpl

Number of Lanes: 1

K

Congestion Type: Cross Road Signal Queue

Location: Chamblee Dunwoody Rd

Frequency: Intermittent

Direction: Eastbound

Queue Population: 20 to 40 vpl

Number of Lanes: 1

L

Congestion Type: Cross Road Signal Queue

Location: Druid Hills Rd

Frequency: Most Observations

Direction: Eastbound

Queue Population: 30 to 60 vpl

Number of Lanes: 2

M

Congestion Type: Left-Turn Queue

Location: Lenox Rd

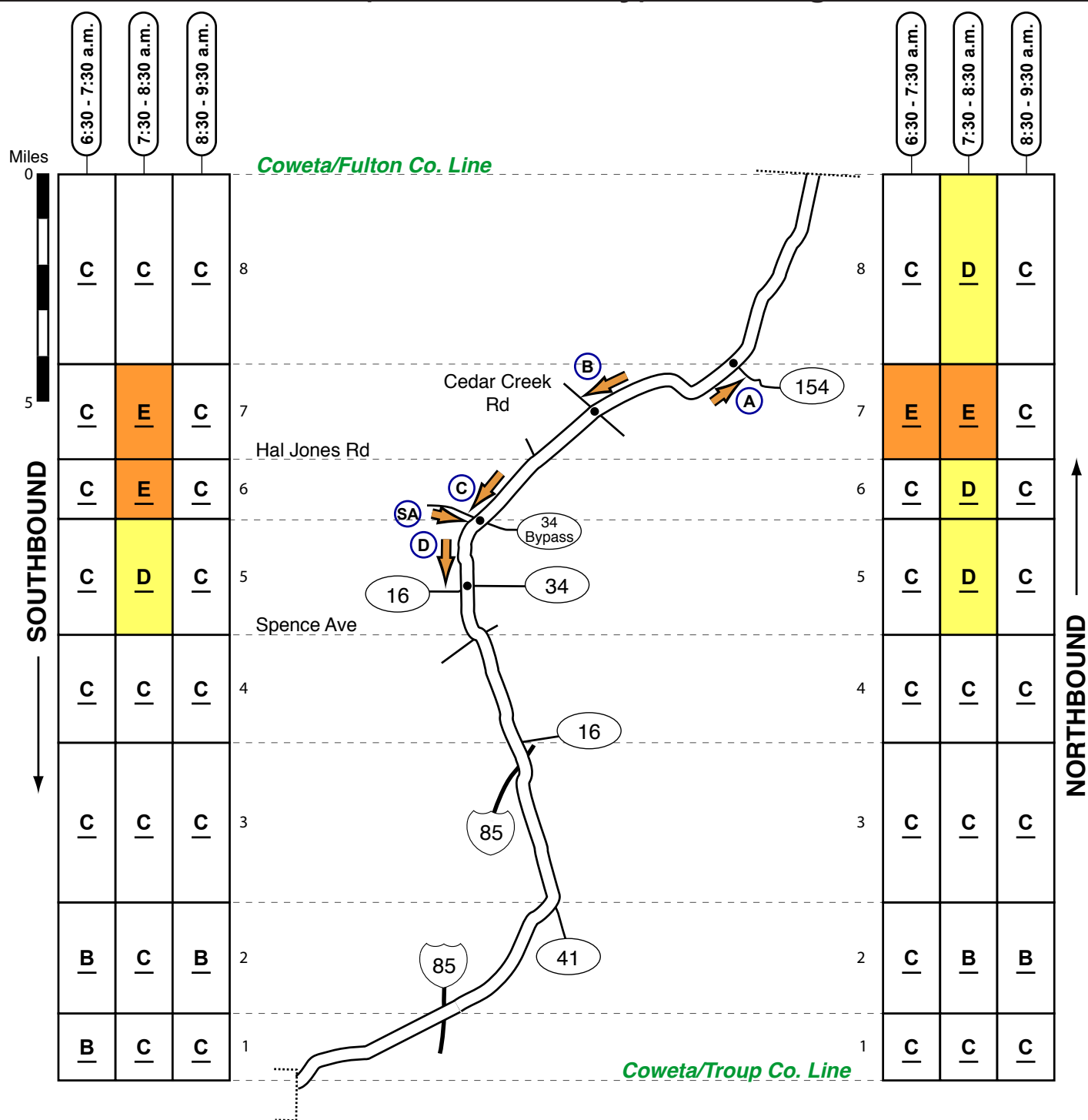
Frequency: Most observations after 5:00 p.m.

Direction: Northbound

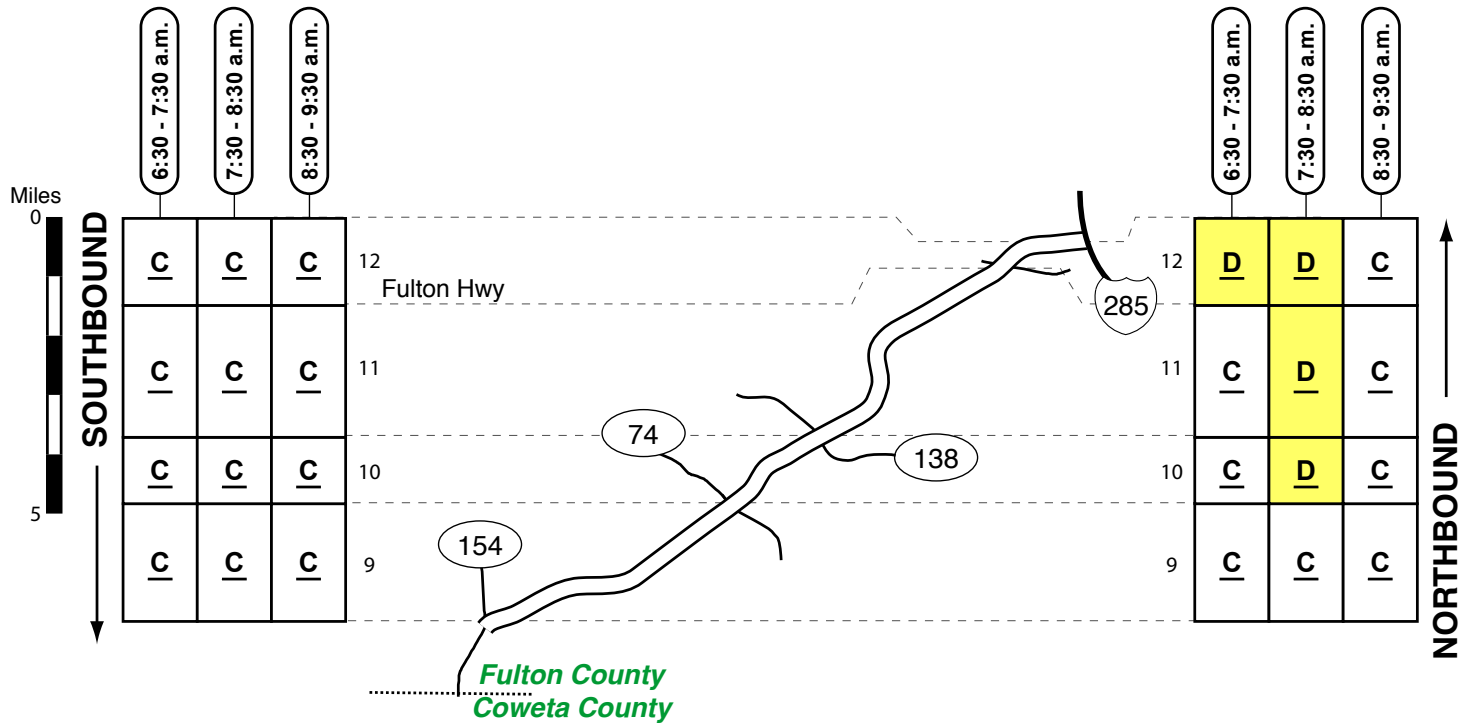
Queue Population: 20 to 45 vpl

Number of Lanes: 1

SR 14 (Coweta County) - Morning



SR 14 (Fulton County) - Morning



A
 Congestion Type: Mainline Signal Queue
 Location: SR 154
 Frequency: Intermittent
 Direction: Northbound
 Queue Population: 20 to 40 vpl
 Number of Lanes: 1

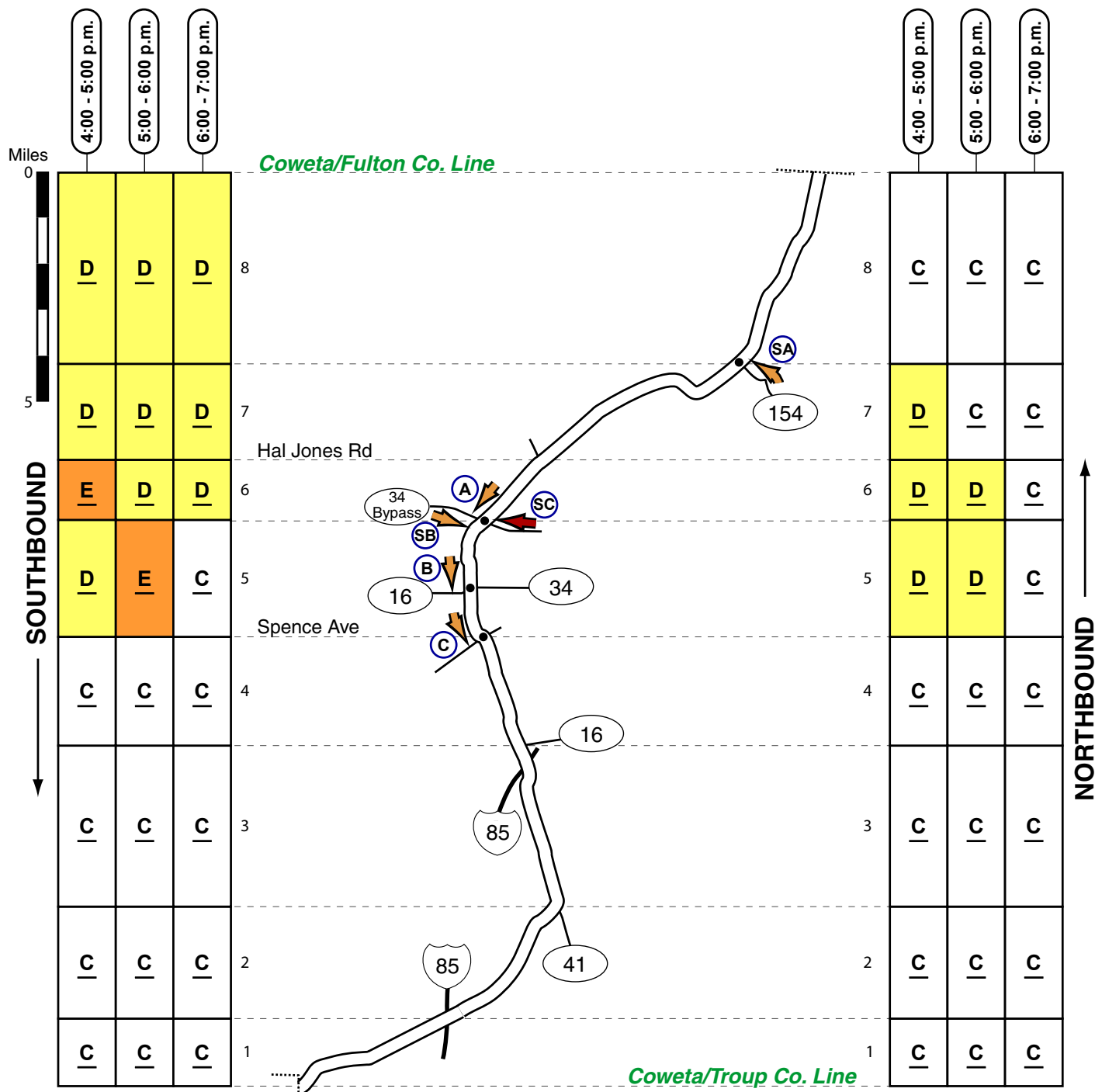
B
 Congestion Type: Mainline Signal Queue
 Location: Cedar Creek Rd
 Frequency: One time only
 Direction: Southbound
 Queue Population: 20 to 25 vpl
 Number of Lanes: 1
 Note: A traffic signal was added at the intersection of SR 14 and Cedar Creek Rd between the aerial surveys conducted in 2008 and 2010.

C
 Congestion Type: Mainline Signal Queue
 Location: SR 34 Bypass
 Frequency: Intermittent
 Direction: Southbound
 Queue Population: 20 to 25 vpl
 Number of Lanes: 1

D
 Congestion Type: Mainline Signal Queue
 Location: SR 16 / SR 34
 Frequency: Intermittent
 Direction: Southbound
 Queue Population: 20 to 25 vpl
 Number of Lanes: 1

SA
 Congestion Type: Surveyed Cross Road Signal Queue
 Location: SR 34 Bypass
 Frequency: Intermittent
 Direction: Eastbound
 Queue Population: 20 to 35 vpl
 Number of Lanes: 1

SR 14 (Coweta County) - Evening

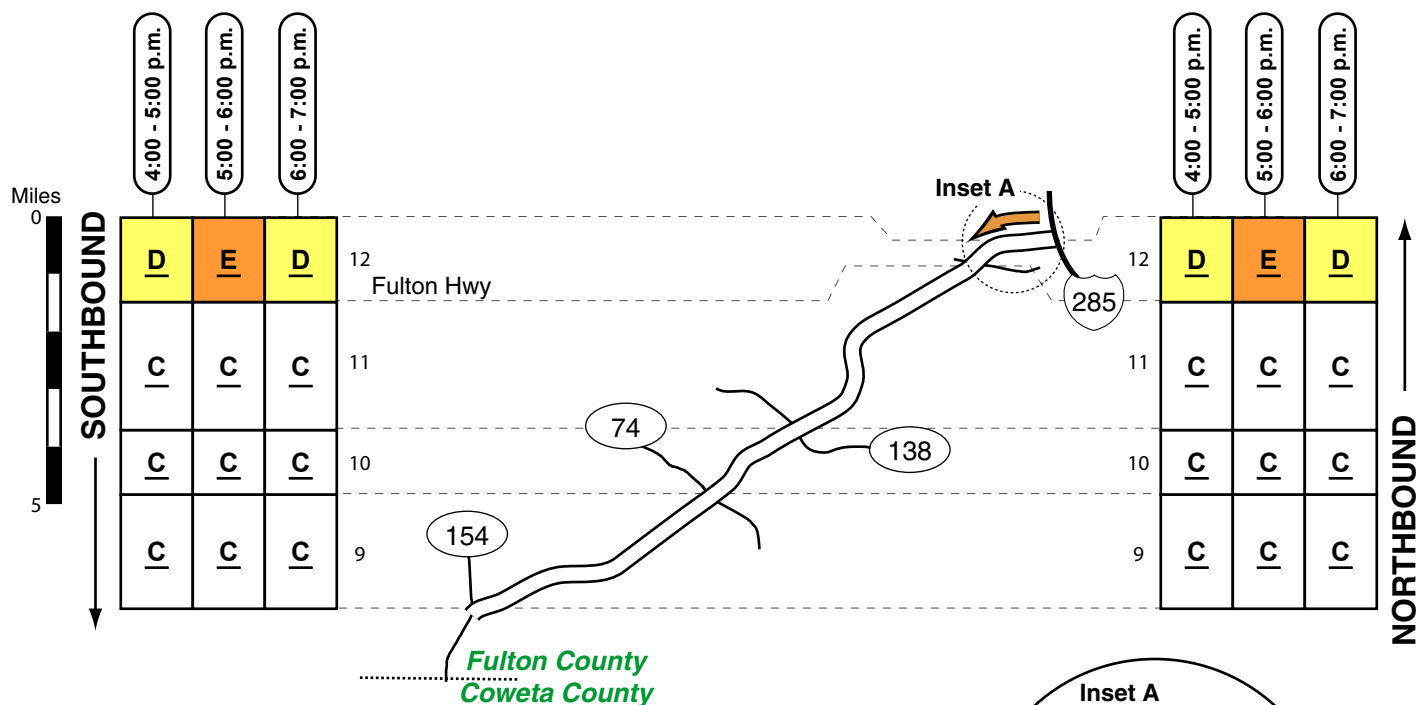


Spring/Fall 2010

SR 14 (Fulton County) - Evening

PERFORMANCE RATINGS

101



A
 Congestion Type: Mainline Signal Queue
 Location: SR 34 Bypass
 Frequency: Intermittent
 Direction: Southbound
 Queue Population: 20 to 30 vpl
 Number of Lanes: 1

B
 Congestion Type: Mainline Signal Queue
 Location: SR 16 / SR 34
 Frequency: Intermittent
 Direction: Southbound
 Queue Population: 20 to 25 vpl
 Number of Lanes: 1

C
 Congestion Type: Mainline Signal Queue
 Location: Spence Ave
 Frequency: Intermittent
 Direction: Southbound
 Queue Population: 20 to 40 vpl
 Number of Lanes: 1

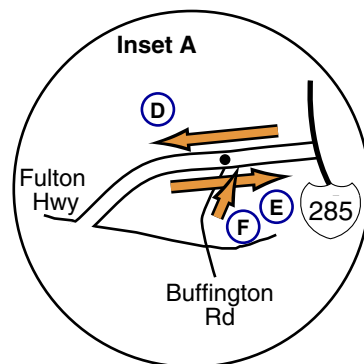
D
 Congestion Type: Platoons
 Location: Between I-285 & Fulton Highway
 Frequency: Intermittent
 Direction: Westbound
 Platoon Population: 25 to 35 vpl
 Number of Lanes: 1

E
 Congestion Type: Platoons
 Location: Between Fulton Highway & I-285
 Frequency: Intermittent
 Direction: Eastbound
 Platoon Population: 25 to 35 vpl
 Number of Lanes: 1

F
 Congestion Type: Cross Road Signal Queue
 Location: Buffington Rd
 Frequency: Intermittent
 Direction: Northbound
 Queue Population: 20 to 40 vpl
 Number of Lanes: 1

SA
 Congestion Type: Surveyed Cross Road Signal Queue
 Location: SR 154
 Frequency: Intermittent
 Direction: Northbound
 Queue Population: 20 to 50 vpl
 Number of Lanes: 1

SB
 Congestion Type: Surveyed Cross Road Signal Queue
 Location: SR 34 Bypass
 Frequency: Intermittent
 Direction: Eastbound
 Queue Population: 20 to 35 vpl
 Number of Lanes: 1



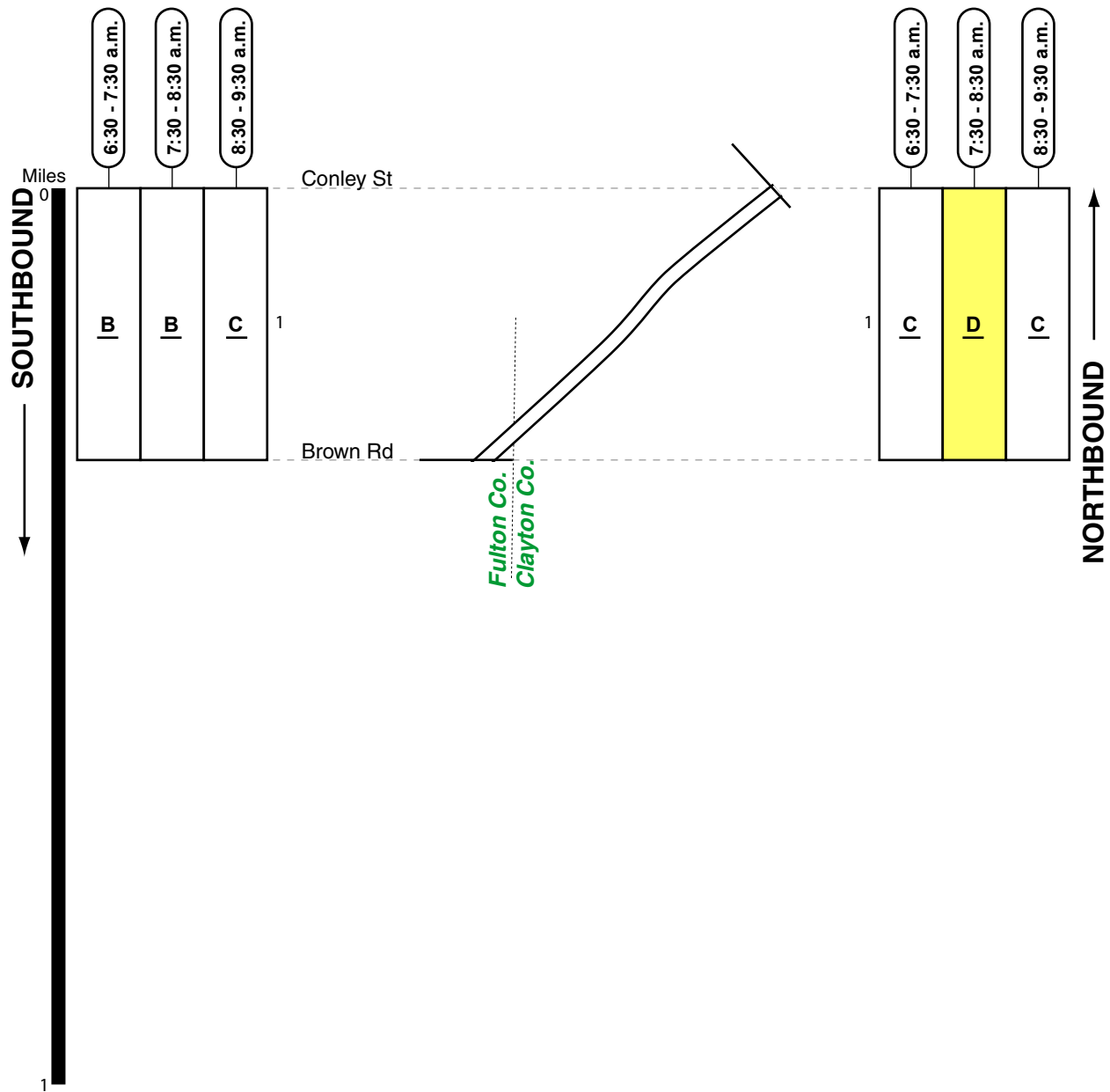
SC
 Congestion Type: Surveyed Cross Road Signal Queue
 Location: SR 34 Bypass
 Frequency: Most observations
 Direction: Westbound
 Queue Population: 20 to 60 vpl
 Number of Lanes: 1
 Note: During one observation, the queue contained approximately 110 vehicles.

SD
 Congestion Type: Surveyed Cross Road Signal Queue
 Location: SR 34
 Frequency: Intermittent
 Direction: Westbound
 Queue Population: 20 to 40 vpl
 Number of Lanes: 2

Arterial LOS Legend

| A | B | C | D | E | F |
|------------|-------|----------|-------|-----------|--------|
| Very Light | Light | Moderate | Heavy | Congested | Severe |

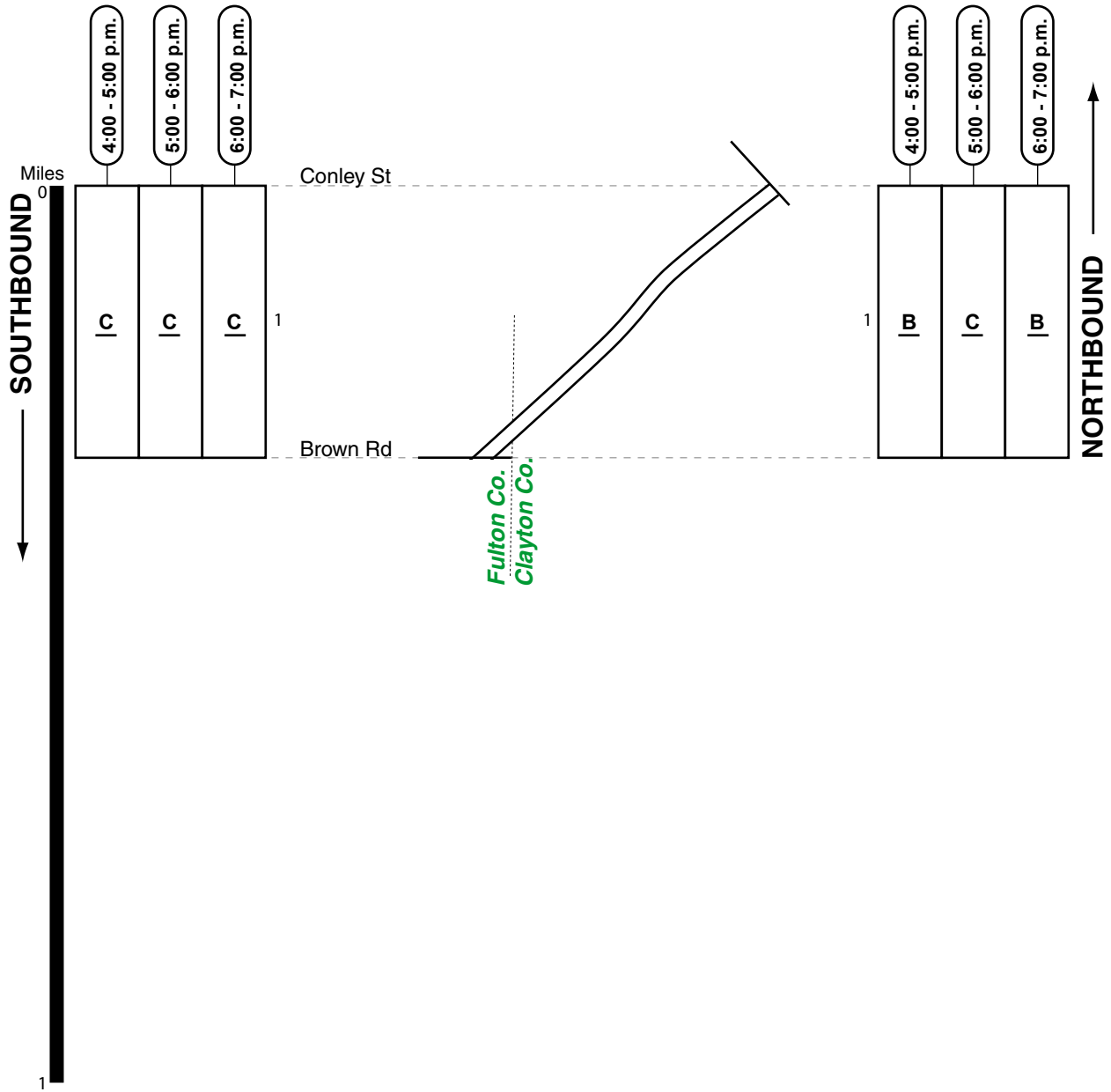
SR 14 (Clayton County) - Morning



Arterial LOS Legend

| A | B | C | D | E | F |
|------------|-------|----------|-------|-----------|--------|
| Very Light | Light | Moderate | Heavy | Congested | Severe |

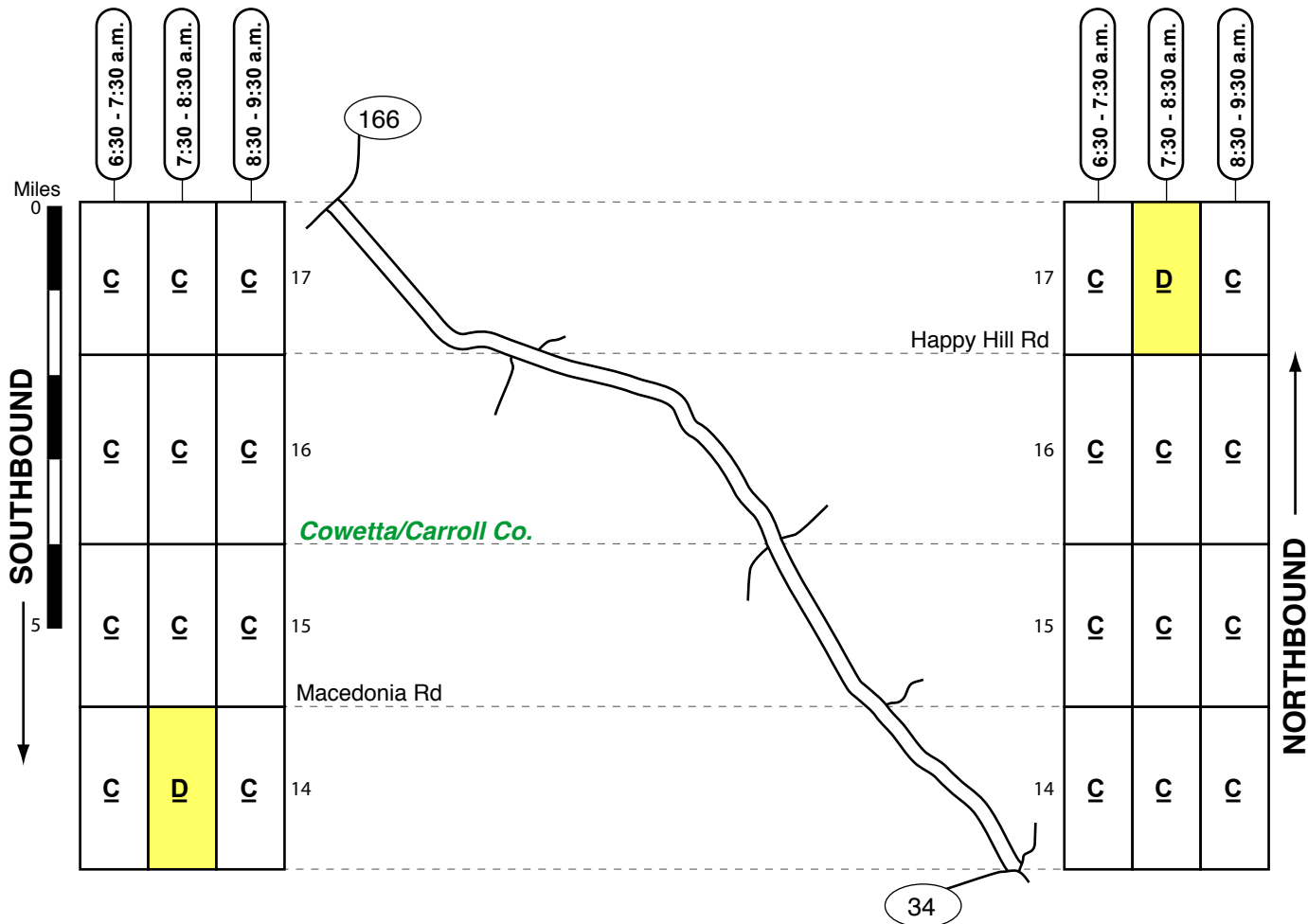
SR 14 (Clayton County) - Evening



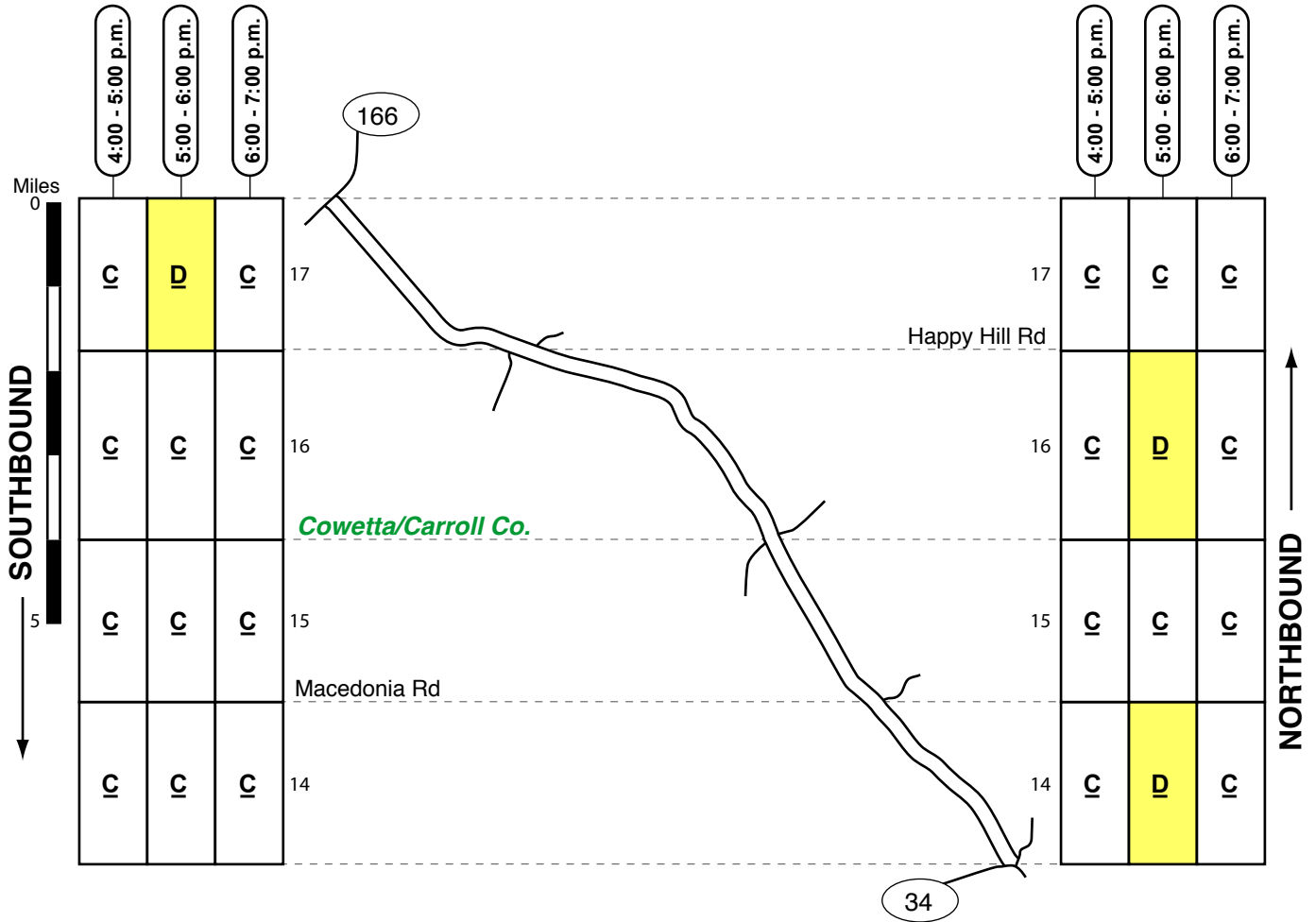
Arterial LOS Legend

| A | B | C | D | E | F |
|------------|-------|----------|-------|-----------|--------|
| Very Light | Light | Moderate | Heavy | Congested | Severe |

SR 16 (Carroll/Coweta Counties) - Morning



SR 16 (Carroll/Coweta Counties) - Evening

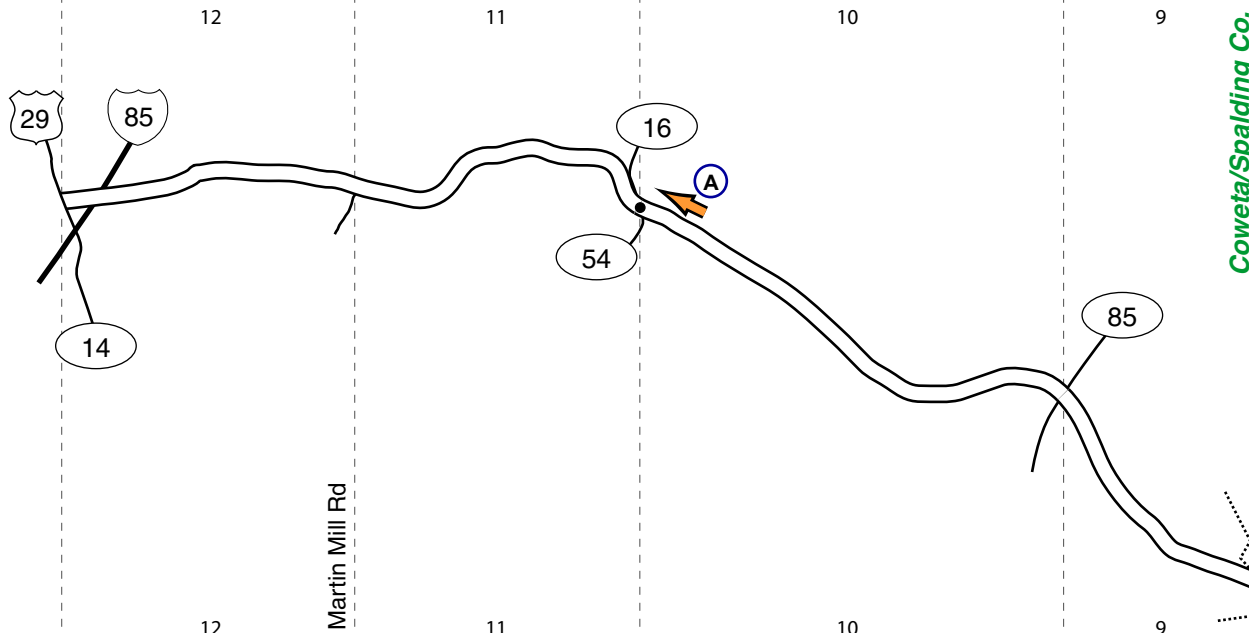


Spring 2010

SR 16 (Coweta County) - Morning

← WESTBOUND

| | | | | |
|------------------|----------|----------|----------|----------|
| 6:30 - 7:30 a.m. | <u>C</u> | <u>C</u> | <u>C</u> | <u>C</u> |
| 7:30 - 8:30 a.m. | <u>C</u> | <u>C</u> | D | <u>C</u> |
| 8:30 - 9:30 a.m. | <u>C</u> | <u>C</u> | <u>C</u> | <u>C</u> |
| | 12 | 11 | 10 | 9 |



| | | | | |
|------------------|----------|----------|----------|----------|
| 6:30 - 7:30 a.m. | <u>C</u> | <u>C</u> | <u>C</u> | <u>C</u> |
| 7:30 - 8:30 a.m. | <u>C</u> | D | <u>C</u> | <u>C</u> |
| 8:30 - 9:30 a.m. | <u>C</u> | <u>C</u> | <u>C</u> | <u>C</u> |

0 5
Miles

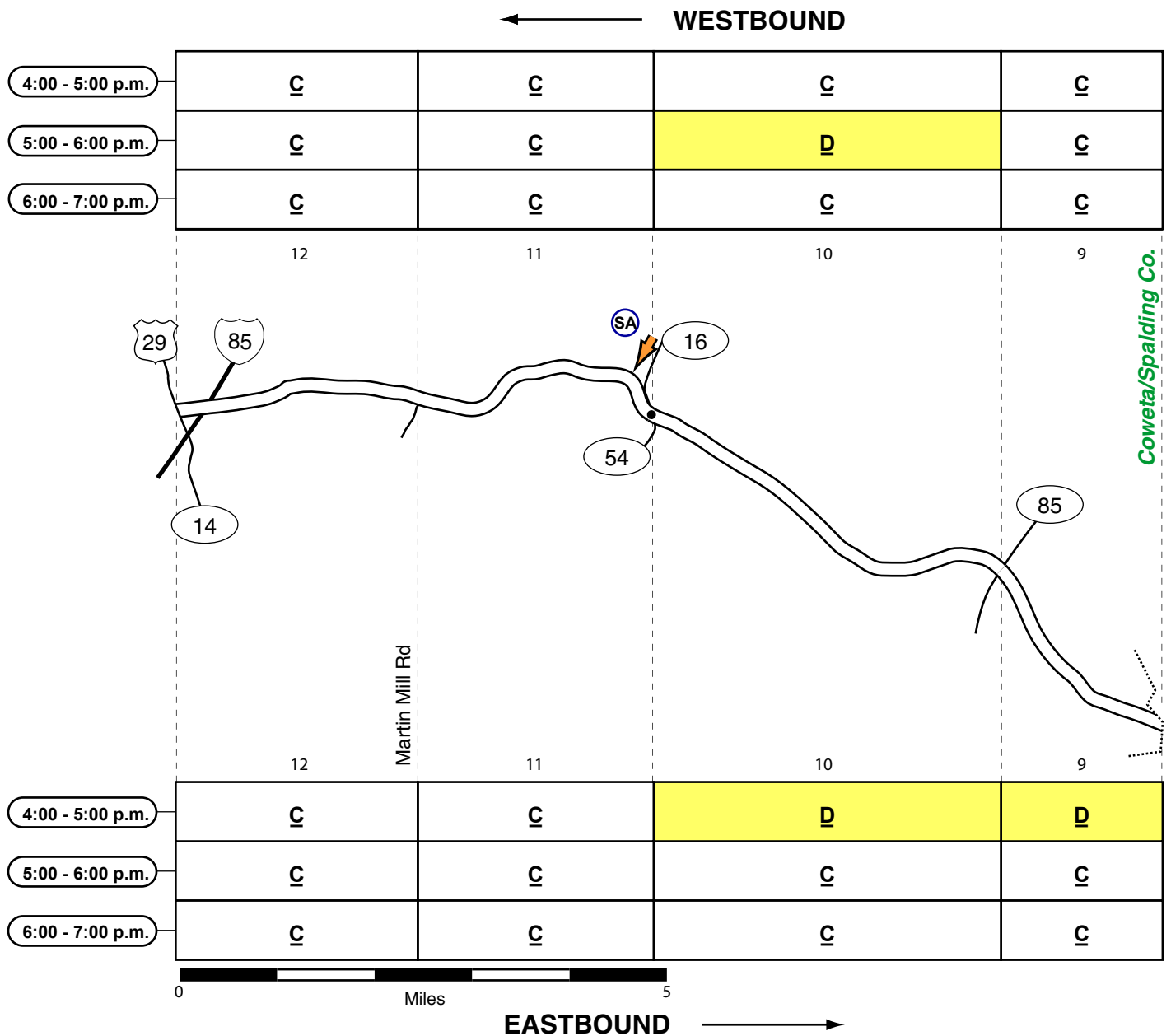
→ EASTBOUND

A
Congestion Type: Mainline Signal Queue
Location: SR 54
Frequency: One Time Only
Direction: Westbound
Queue Population: 30 to 40 vpl
Number of Lanes: 1

Arterial LOS Legend

| | | | | | |
|------------|----------|----------|----------|-----------|----------|
| <u>A</u> | <u>B</u> | <u>C</u> | D | E | F |
| Very Light | Light | Moderate | Heavy | Congested | Severe |

SR 16 (Coweta County) - Evening



SA

Congestion Type: Surveyed Cross Road Signal Queue

Location: SR 16

Frequency: One time only

Direction: Southbound

Queue Population: 20 to 40 vpl

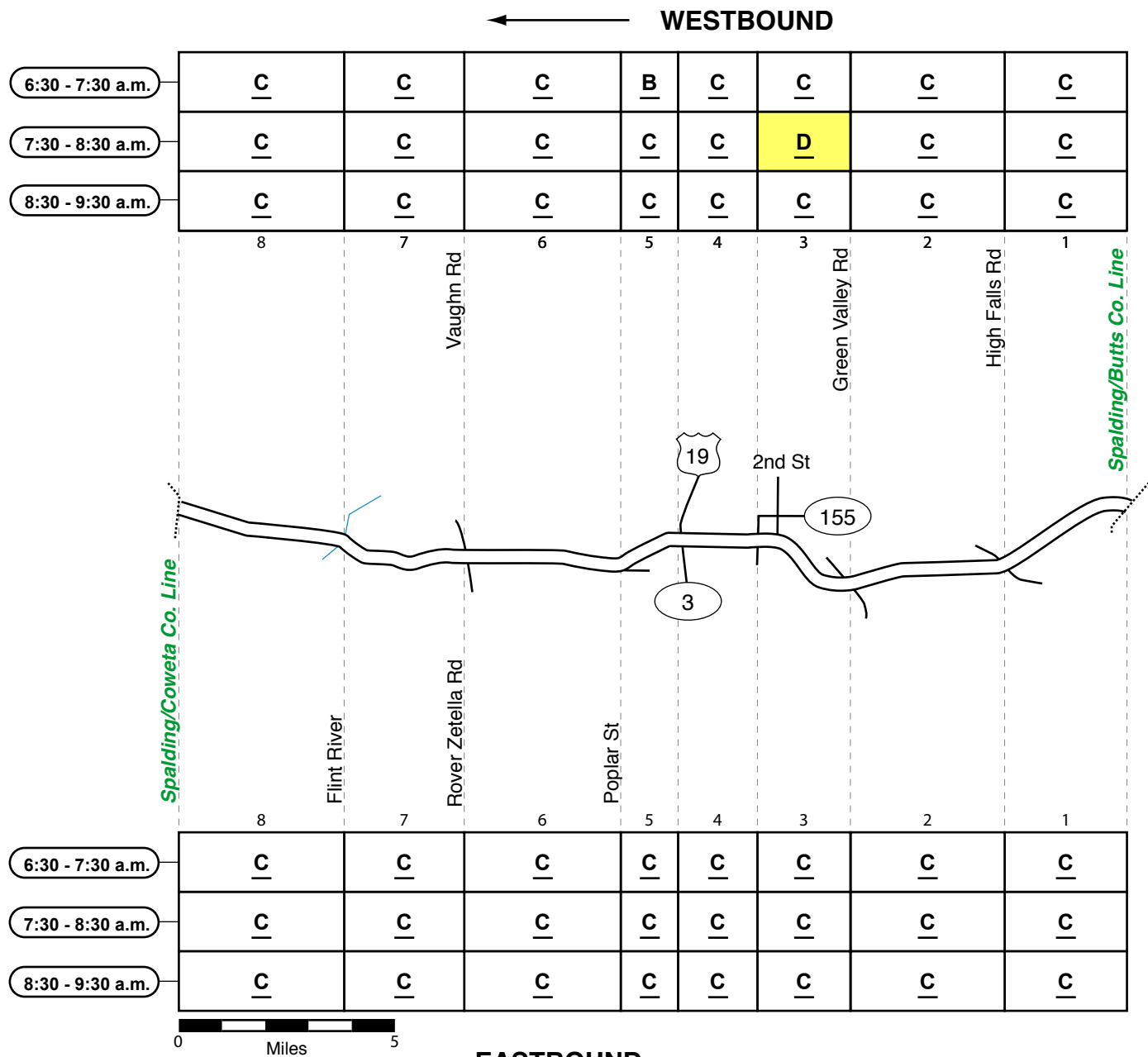
Number of Lanes: 1

Arterial LOS Legend

| A | B | C | D | E | F |
|------------|-------|----------|-------|-----------|--------|
| Very Light | Light | Moderate | Heavy | Congested | Severe |

Spring 2010

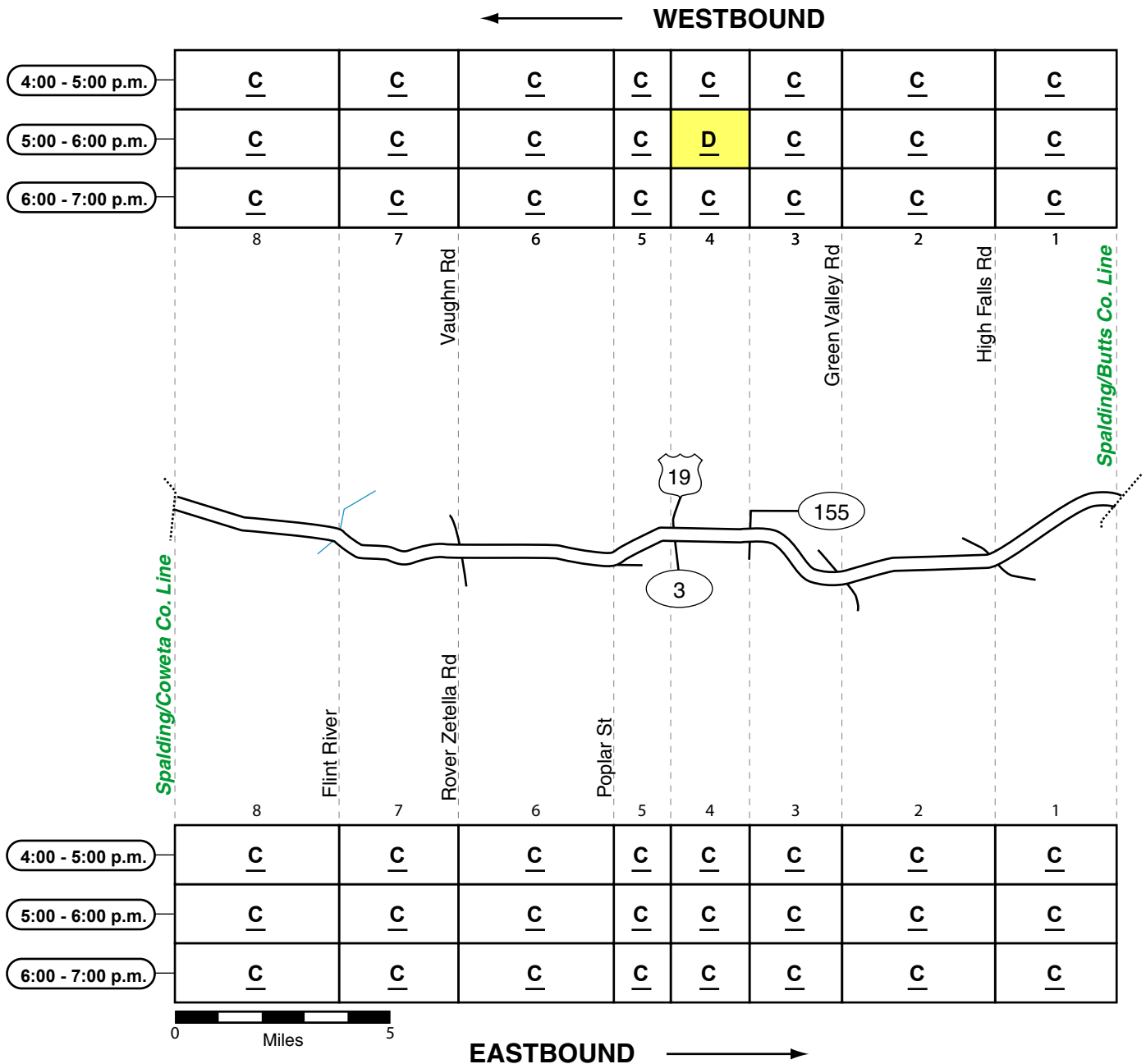
SR 16 (Spalding County) - Morning



Arterial LOS Legend

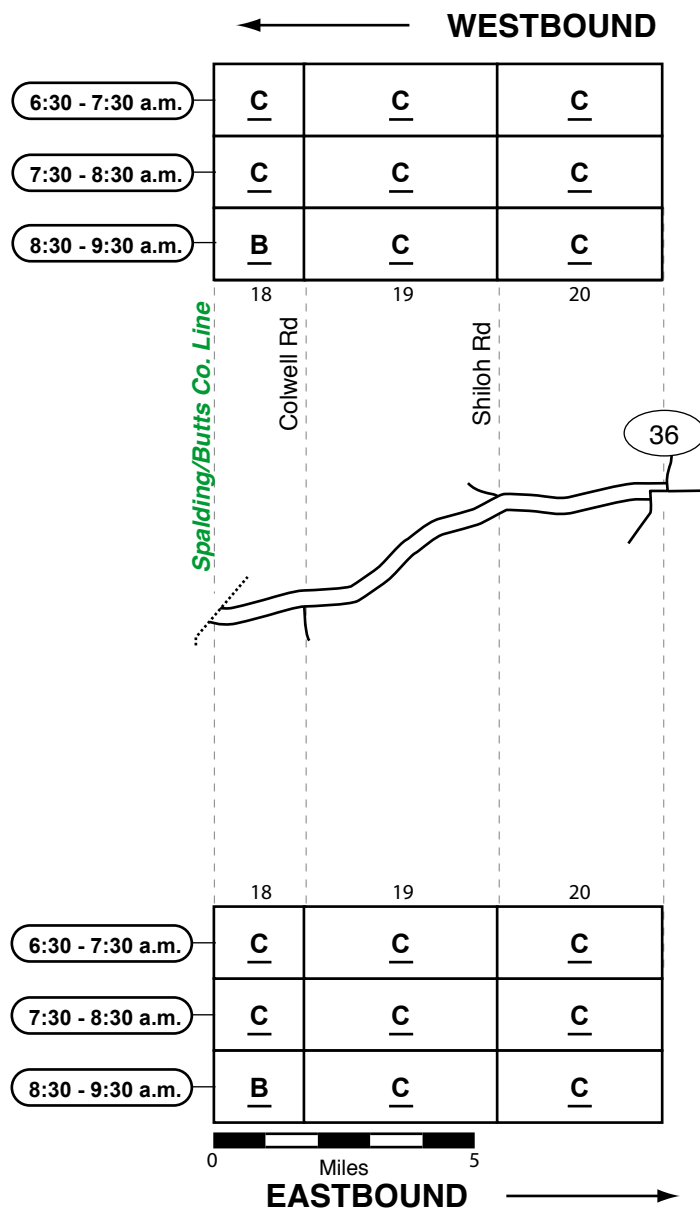
| | | | | | |
|------------|----------|----------|----------|-----------|----------|
| <u>A</u> | <u>B</u> | <u>C</u> | <u>D</u> | <u>E</u> | <u>F</u> |
| Very Light | Light | Moderate | Heavy | Congested | Severe |

SR 16 (Spalding County) - Evening



Spring 2010

SR 16 (Butts County) - Morning

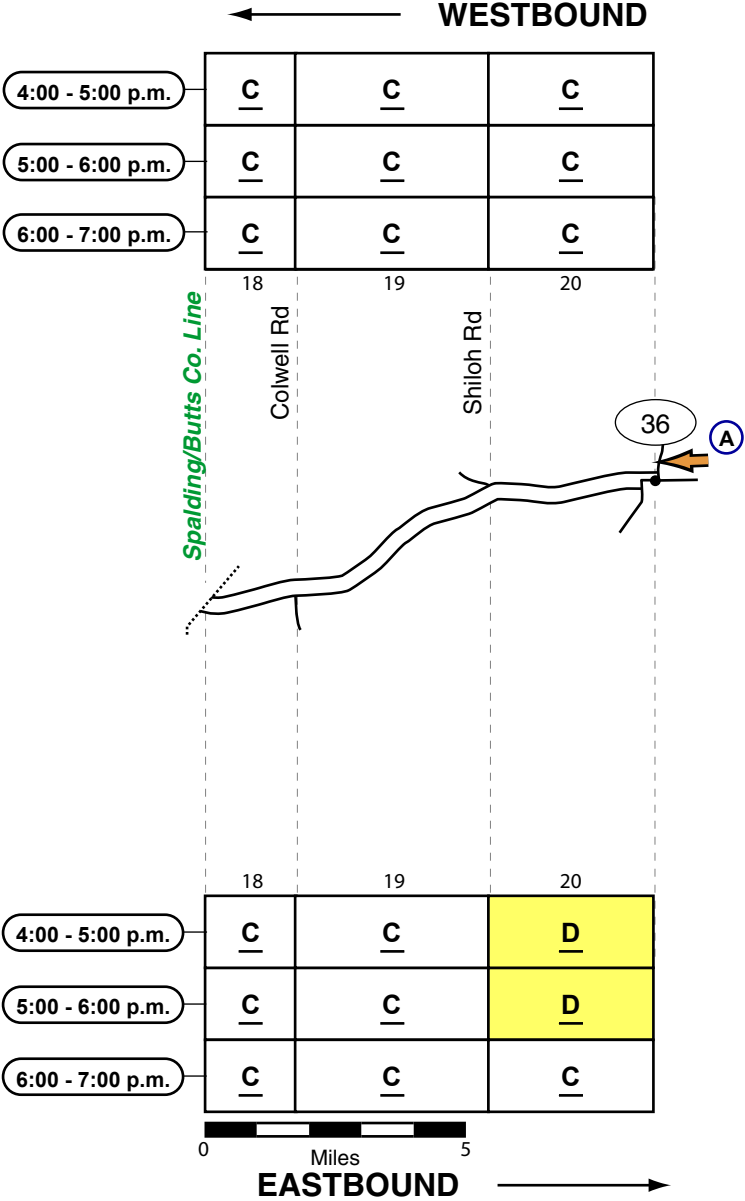


Arterial LOS Legend

| | | | | | |
|------------|----------|----------|----------|-----------|----------|
| <u>A</u> | <u>B</u> | <u>C</u> | <u>D</u> | <u>E</u> | <u>F</u> |
| Very Light | Light | Moderate | Heavy | Congested | Severe |

Spring 2010

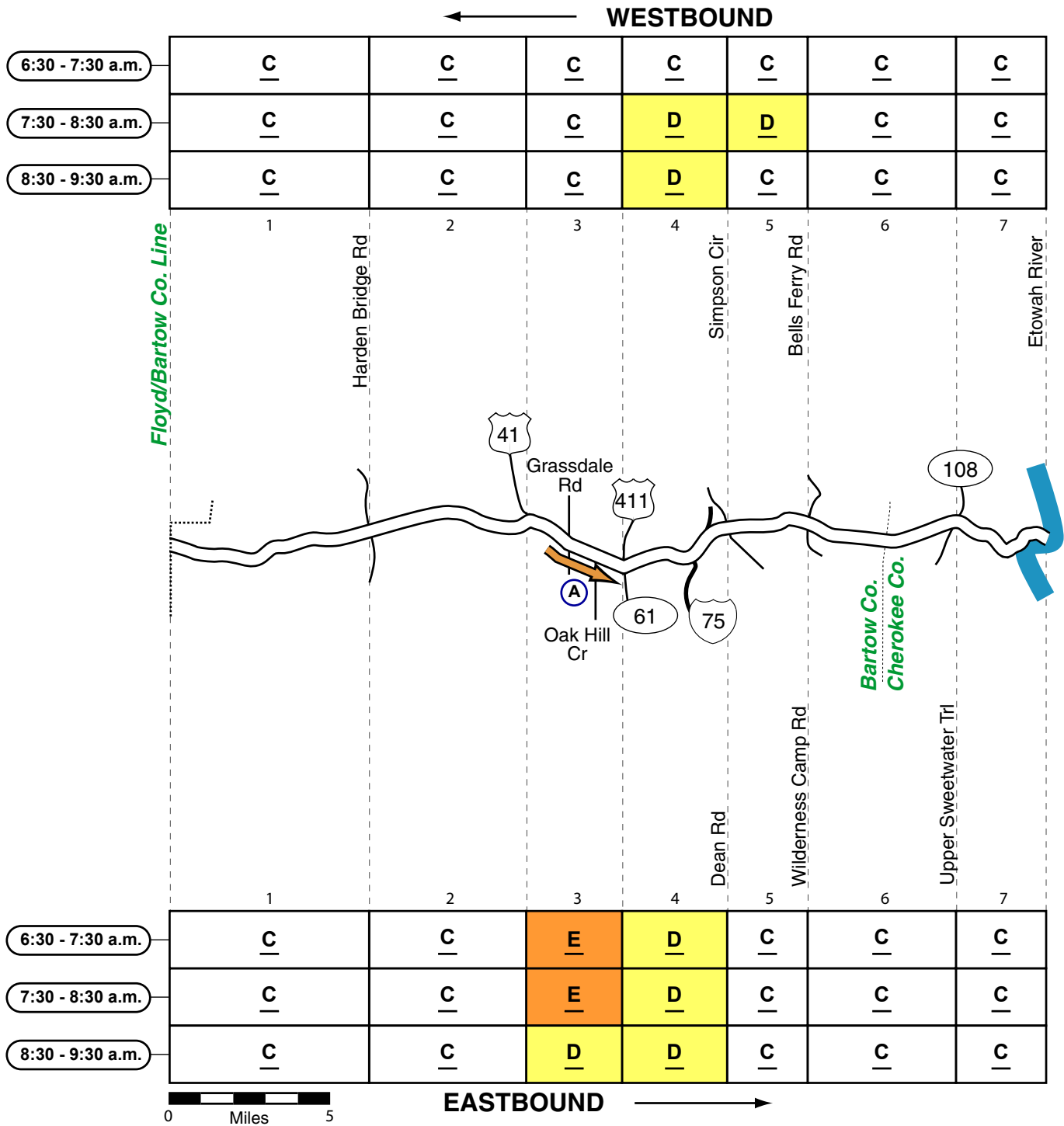
SR 16 (Butts County) - Evening



A
Congestion Type: Cross Road Signal Queue
Location: Covington St
Frequency: Intermittent
Direction: Westbound
Population: 20 to 30 vpl
Number of Lanes: 1

| | | | | | | |
|---------------------|------------|-------|----------|-------|-----------|--------|
| Arterial LOS Legend | A | B | C | D | E | F |
| | Very Light | Light | Moderate | Heavy | Congested | Severe |

SR 20 (Bartow & Cherokee Counties) - Morning



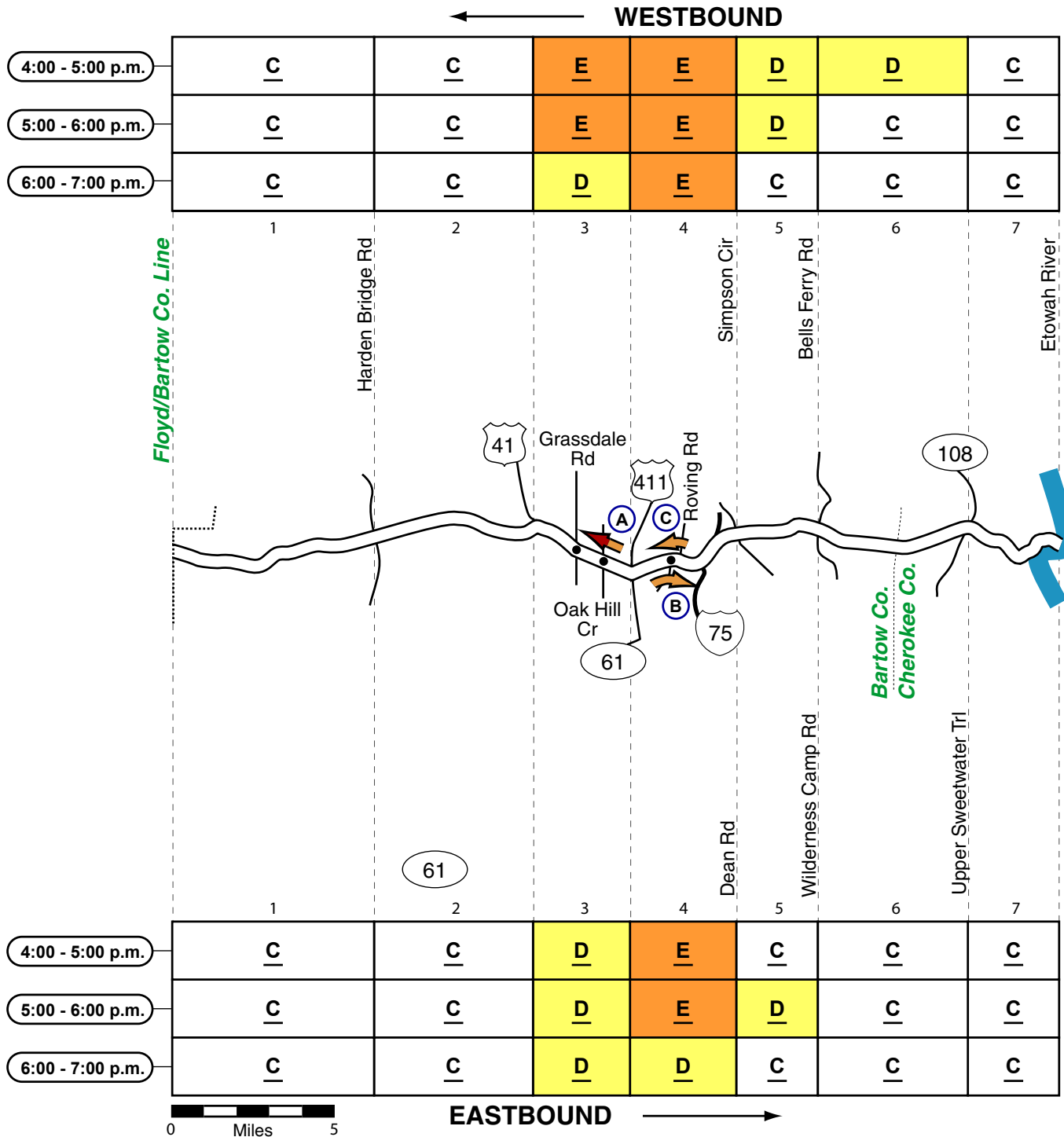
A

Congestion Type: Platoons
 Location: Between US 41 & SR 61
 Frequency: Most Observations
 Direction: Southbound
 Platoon Population: 25 to 35 vpl
 Number of Lanes: 2

Arterial LOS Legend

| | | | | | |
|------------|----------|----------|----------|-----------|----------|
| <u>A</u> | <u>B</u> | <u>C</u> | <u>D</u> | <u>E</u> | <u>F</u> |
| Very Light | Light | Moderate | Heavy | Congested | Severe |

SR 20 (Bartow & Cherokee Counties) - Evening



A
 Congestion Type: Mainline Signal Queue
 Location: Grassdale Rd
 Frequency: Most Observations
 Direction: Westbound
 Queue Population: 20 to 50 vpl
 Number of Lanes: 2
 Note: During some observations, congestion appeared to back through the upstream signal at Oak Hill Circle.

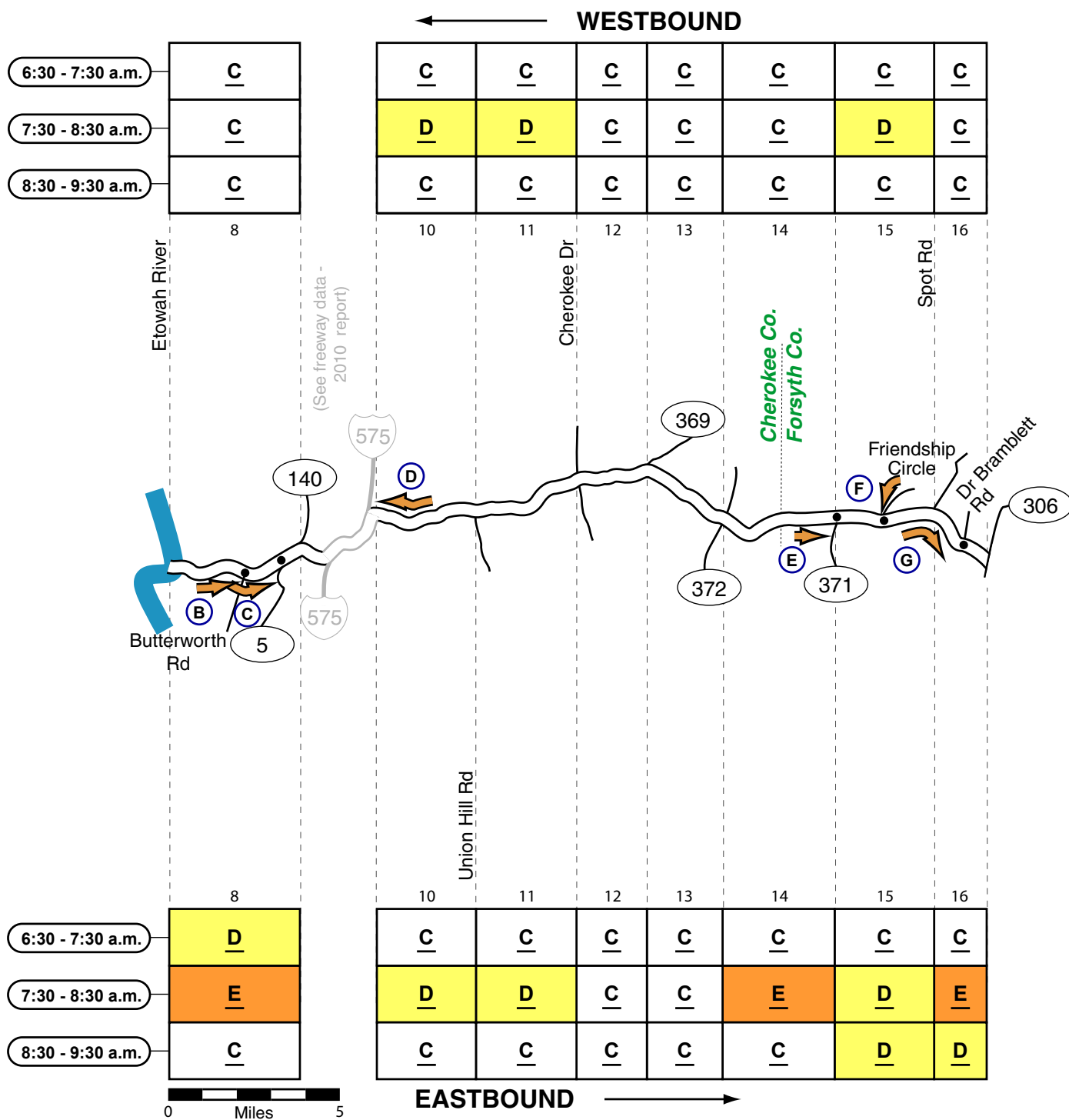
B
 Congestion Type: Platoons
 Location: Between SR 61 & I-75
 Frequency: Most Observations
 Direction: Eastbound
 Platoon Population: 25 to 45 vpl
 Number of Lanes: 1

C
 Congestion Type: Platoons
 Location: Between I-75 & SR 61
 Frequency: Most Observations
 Direction: Westbound
 Platoon Population: 25 to 45 vpl
 Number of Lanes: 1

Arterial LOS Legend

| <u>A</u> | <u>B</u> | <u>C</u> | <u>D</u> | <u>E</u> | <u>F</u> |
|------------|----------|----------|----------|-----------|----------|
| Very Light | Light | Moderate | Heavy | Congested | Severe |

SR 20 (Cherokee & Forsyth Counties) - Morning



Arterial LOS Legend

| | | | | | |
|------------|----------|----------|----------|-----------|----------|
| <u>A</u> | <u>B</u> | <u>C</u> | <u>D</u> | <u>E</u> | <u>F</u> |
| Very Light | Light | Moderate | Heavy | Congested | Severe |

SR 20 (Cherokee & Forsyth Counties) - Morning

B

Congestion Type: Mainline Signal Queue
Location: Butterworth Rd
Frequency: Intermittent
Direction: Eastbound
Queue Population: 25 to 30 vpl
Number of Lanes: 1

C

Congestion Type: Mainline Signal Queue
Location: SR 5
Frequency: One time only
Direction: Eastbound
Queue Population: 40 to 45 vpl
Number of Lanes: 1

D

Congestion Type: Platoons
Location: Between Union Hill Rd & I-575
Frequency: One time only
Direction: Westbound
Platoon Population: 25 to 35 vpl
Number of Lanes: 1

E

Congestion Type: Mainline Signal Queue
Location: SR 371
Frequency: Intermittent
Direction: Eastbound
Queue Population: 20 to 30 vpl
Number of Lanes: 1

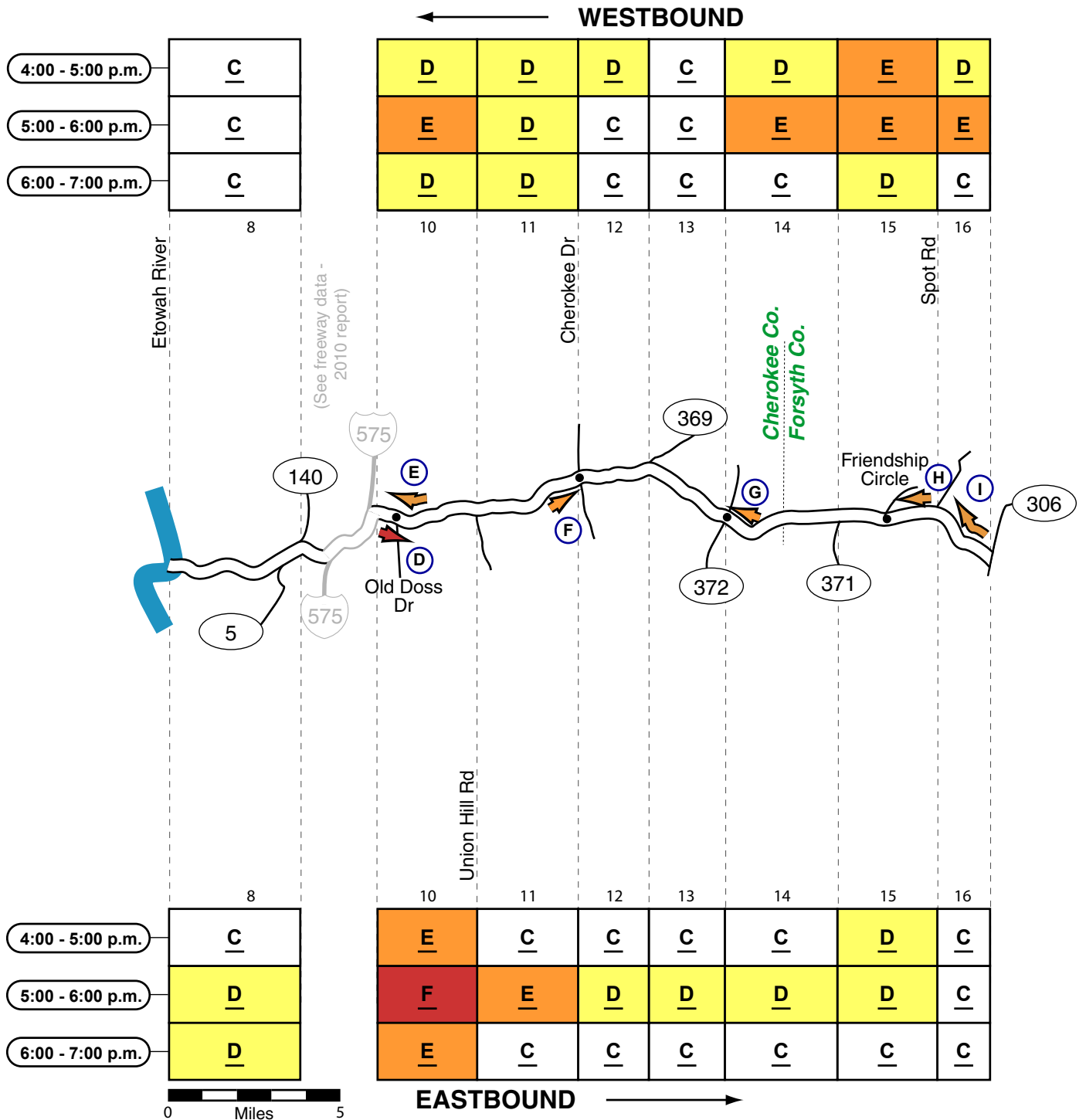
F

Congestion Type: Cross Road Signal Queue
Location: Friendship Circle
Frequency: Intermittent
Direction: Southbound
Queue Population: 20 to 40 vpl
Number of Lanes: 1

G

Congestion Type: Mainline Signal Queue
Location: Dr Bramblett Rd
Frequency: Intermittent
Direction: Eastbound
Queue Population: 20 to 30 vpl
Number of Lanes: 1

SR 20 (Cherokee & Forsyth Counties) - Evening



SR 20 (Cherokee & Forsyth Counties) - Evening

D

Congestion Type: Mainline Signal Queue

Location: Old Doss Dr

Frequency: Most Observations

Direction: Eastbound

Queue Population: 30 to 50 vpl

Number of Lanes: 1

Note: Congestion was exacerbated by the lane drop (2 lanes to 1) just west of the signal. Intermittently, congestion would extend back onto the ramp from I-575 (northbound).

E

Congestion Type: Platoons

Location: Between Union Hill Rd & I-575

Frequency: Intermittent

Direction: Westbound

Platoon Population: 25 to 35 vpl

Number of Lanes: 1

Note: During one observation, approximately 30 vehicles were queued at the signal at Brooke Park Dr.

F

Congestion Type: Mainline Signal Queue

Location: Cherokee Dr

Frequency: Intermittent

Direction: Eastbound

Queue Population: 20 to 40 vpl

Number of Lanes: 1

G

Congestion Type: Mainline Signal Queue

Location: SR 372

Frequency: Intermittent

Direction: Westbound

Queue Population: 20 to 25 vpl

Number of Lanes: 1

H

Congestion Type: Mainline Signal Queue

Location: Friendship Circle

Frequency: Intermittent

Direction: Westbound

Queue Population: 20 to 25 vpl

Number of Lanes: 1

I

Congestion Type: Platoons

Location: Between SR 306 and Spot Rd

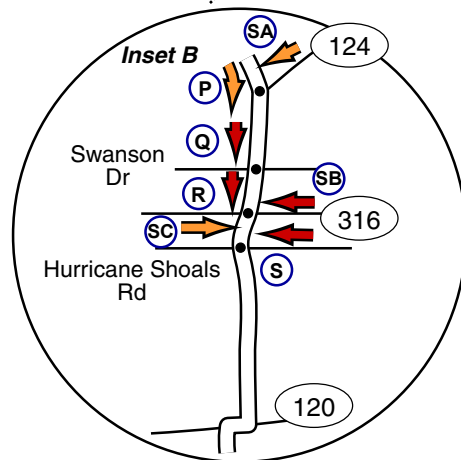
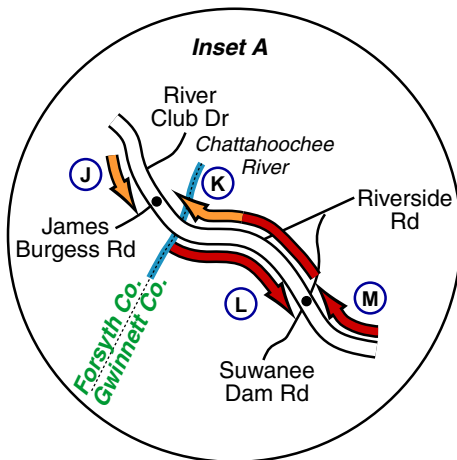
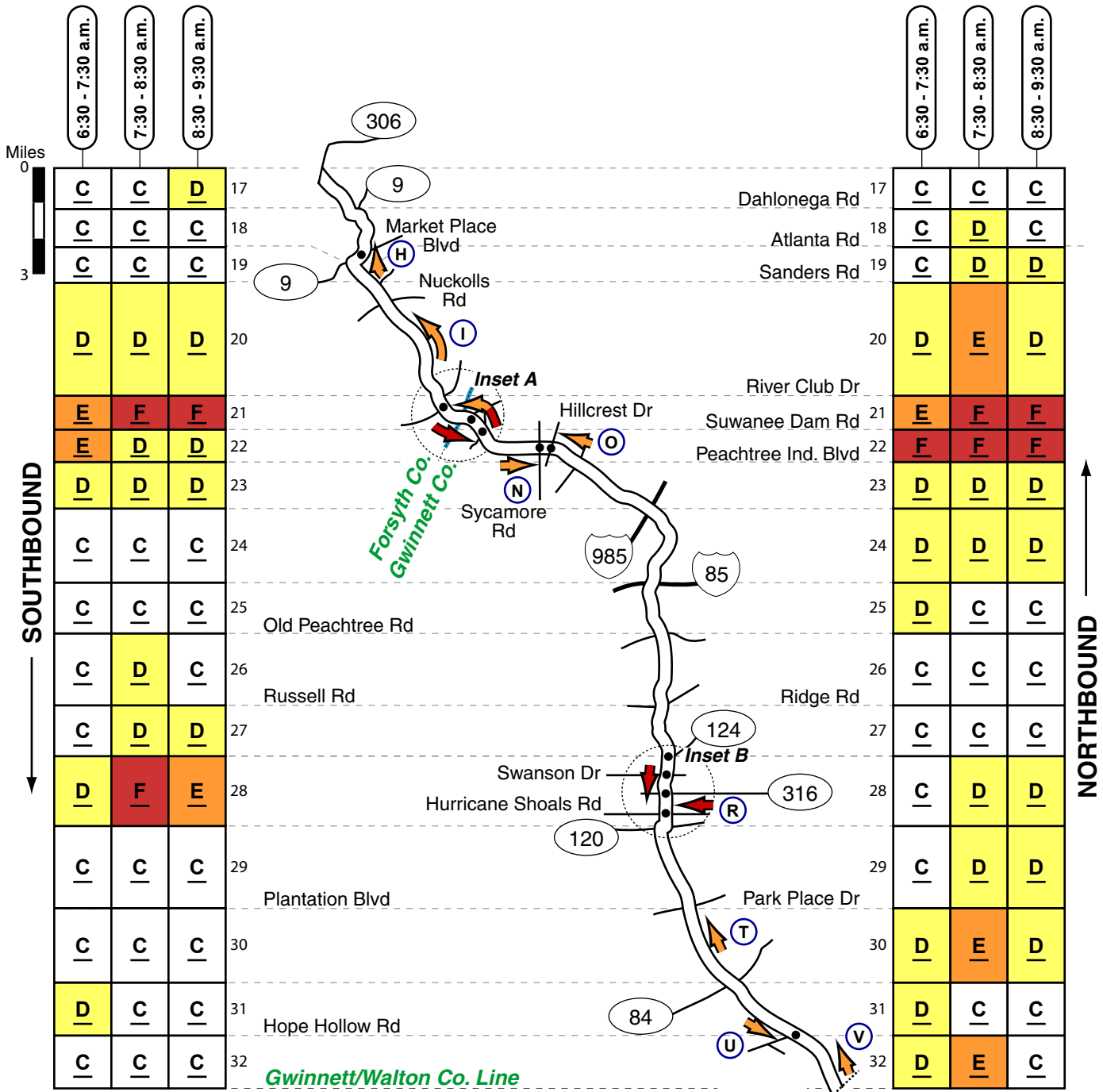
Frequency: Intermittent

Direction: Westbound

Platoon Population: 25 to 30 vpl

Number of Lanes: 1

SR 20 (Forsyth & Gwinnett Counties) - Morning



Arterial LOS Legend

| A | B | C | D | E | F |
|------------|-------|----------|-------|-----------|--------|
| Very Light | Light | Moderate | Heavy | Congested | Severe |

SR 20 (Forsyth & Gwinnett Counties) - Morning

H

Congestion Type: Mainline Signal Queue
Location: Market Place Blvd
Frequency: Intermittent
Direction: Northbound
Queue Population: 20 to 25 vpl
Number of Lanes: 2

I

Congestion Type: Platoons
Location: Between River Club Dr & Sanders Rd
Frequency: Peak Hour
Direction: Northbound
Platoon Population: 25 to 45 vpl
Number of Lanes: 1

J

Congestion Type: Mainline Signal Queue
Location: James Burgess Rd
Frequency: Intermittent
Direction: Southbound
Queue Population: 20 to 25 vpl
Number of Lanes: 1

K

Congestion Type: Mainline Queue/Platoons
Location: Between Suwanee Dam Rd & James Burgess Rd
Frequency: Most Observations
Direction: Northbound
Queue Population: 30 to 80 vpl
Number of Lanes: 1
Note: Factors contributing to the congestion were: 1) the signal at James Burgess Rd; 2) the bridge at the Chattahoochee River and; 3) traffic entering at Riverside Rd.

L

Congestion Type: Mainline Signal Queue
Location: Suwanee Dam Rd
Frequency: Most Observations
Direction: Southbound
Queue Population: 20 to 70 vpl
Number of Lanes: 1

M

Congestion Type: Mainline Signal Queue
Location: Suwanee Dam Rd
Frequency: Most Observations
Direction: Northbound
Queue Population: 20 to 90 vpl
Number of Lanes: 1

N

Congestion Type: Mainline Signal Queue
Location: Sycamore Rd
Frequency: Intermittent
Direction: Southbound
Queue Population: 20 to 25 vpl
Number of Lanes: 1

O

Congestion Type: Mainline Signal Queue
Location: Hillcrest Dr
Frequency: Intermittent
Direction: Northbound
Queue Population: 20 to 30 vpl
Number of Lanes: 1

P

Congestion Type: Mainline Signal Queue
Location: SR 124
Frequency: Intermittent
Direction: Southbound
Queue Population: 20 to 40 vpl
Number of Lanes: 2

Q

Congestion Type: Mainline Signal Queue
Location: Swanson Dr
Frequency: Most observations after 7:30 a.m.
Direction: Southbound
Queue Population: 25 to 45 vpl
Number of Lanes: 2

R

Congestion Type: Mainline Signal Queue
Location: SR 316
Frequency: Most observations after 7:00 a.m.
Direction: Southbound
Queue Population: 20 to 40 vpl
Number of Lanes: 2
Note: During one observation, congestion backed through the upstream signals at Swanson Dr and SR 124.

S

Congestion Type: Cross Road Signal Queue
Location: Hurricane Shoals Rd
Frequency: Peak Hour
Direction: Westbound
Queue Population: 20 to 30 vpl
Number of Lanes: 1

T

Congestion Type: Platoons
Location: Between SR 84 and Webb Gin House Rd
Frequency: Intermittent
Direction: Northbound
Platoon Population: 25 to 35 vpl
Number of Lanes: 2

U

Congestion Type: Mainline Signal Queue
Location: Hope Hollow Rd
Frequency: One day only
Direction: Southbound
Queue Population: 25 to 30 vpl
Number of Lanes: 1

V

Congestion Type: Mainline Queue
Location: Approaching Covenant Christian Academy
Frequency: Between 7:30 and 8:00
Direction: Northbound
Queue Population: 35 to 45 vpl
Number of Lanes: 1
Note: Congestion was caused by left-turning vehicles at the entrance to Covenant Christian Academy.

SA

Congestion Type: Surveyed Cross Road Signal Queue
Location: SR 124
Frequency: Intermittent
Direction: Southbound
Queue Population: 20 to 30 vpl
Number of Lanes: 2

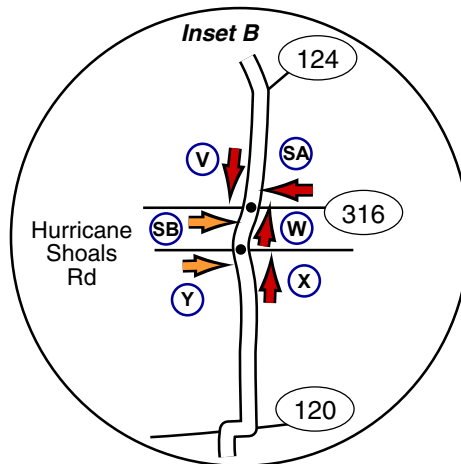
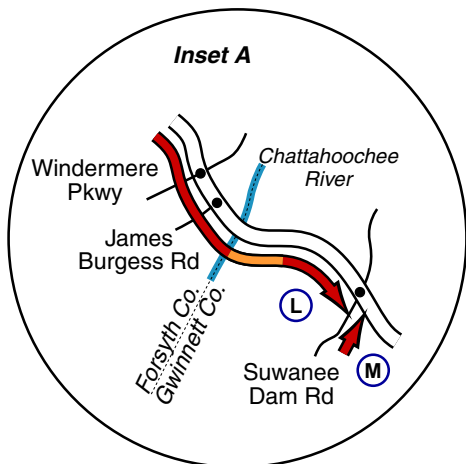
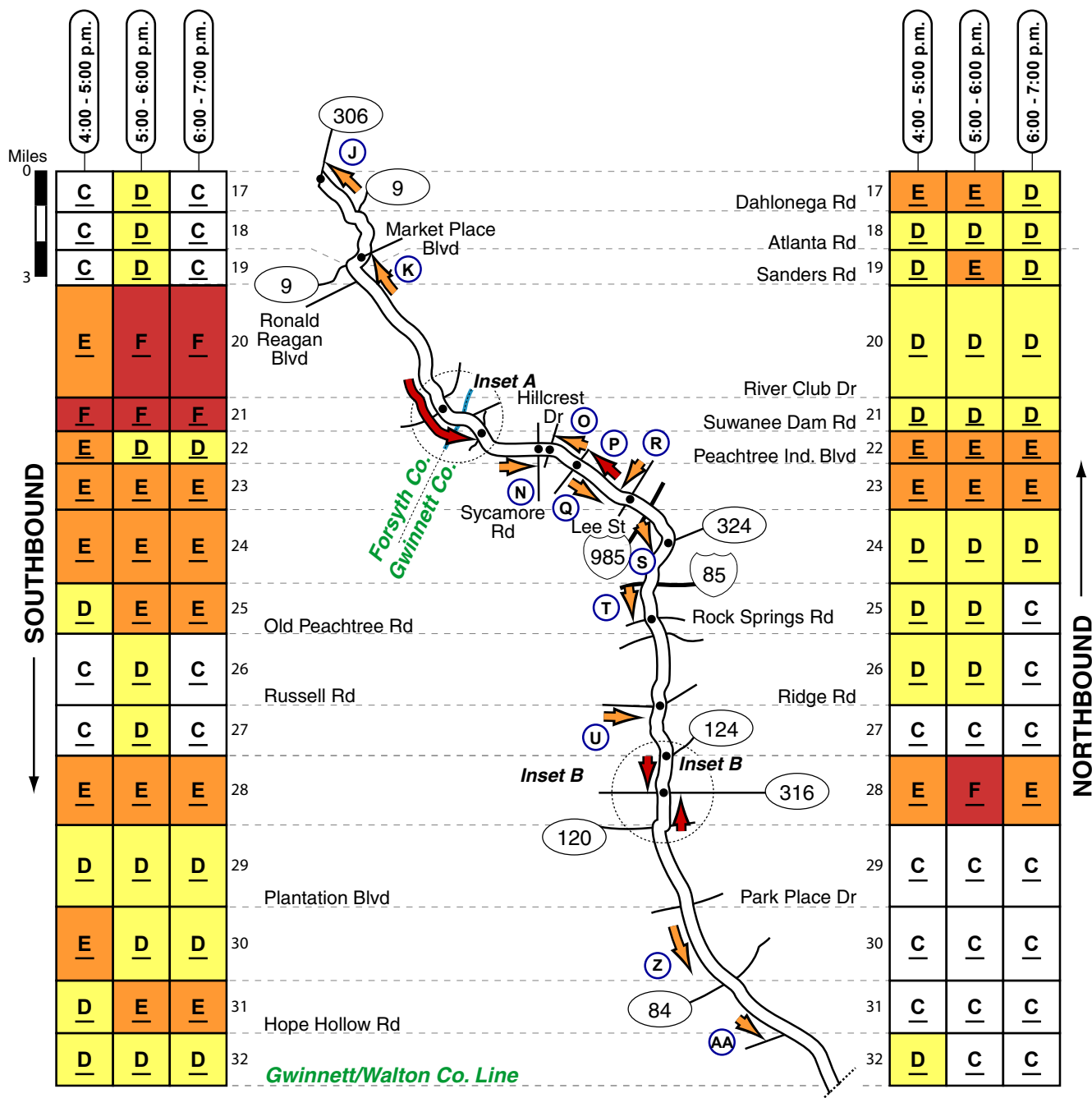
SB

Congestion Type: Surveyed Cross Road Signal Queue
Location: SR 316
Frequency: Most Observations
Direction: Westbound
Queue Population: 20 to 70 vpl
Number of Lanes: 2

SC

Congestion Type: Surveyed Cross Road Signal Queue
Location: SR 316
Frequency: Intermittent
Direction: Eastbound
Queue Population: 20 to 30 vpl
Number of Lanes: 2

SR 20 (Forsyth & Gwinnett Counties) - Evening



Arterial LOS Legend

| A | B | C | D | E | F |
|------------|-------|----------|-------|-----------|--------|
| Very Light | Light | Moderate | Heavy | Congested | Severe |

SR 20 (Forsyth & Gwinnett Counties) - Evening

J

Congestion Type: Mainline Signal Queue
Location: SR 306
Frequency: Intermittent
Direction: Northbound
Queue Population: 20 to 40 vpl
Number of Lanes: 1

K

Congestion Type: Mainline Signal Queue
Location: Market Place Blvd
Frequency: Intermittent
Direction: Northbound
Queue Population: 20 to 25 vpl
Number of Lanes: 2

L

Congestion Type: Mainline Queue
Location: Between Samples Rd & Suwanee Dam Rd
Frequency: Most Observations
Direction: Southbound
Queue Population: to vpl
Number of Lanes: 1
Note: During the peak period, a two to three mile zone of congestion was found on SR 324 approaching and across the Chattahoochee River; the head of the queue was found at the signal at Suwanee Dam Rd. Congestion often extended back through upstream signals at James Burgess Rd and Windermere Pkwy.

M

Congestion Type: Cross Road Signal Queue
Location: Suwanee Dam Rd
Frequency: Most Observations
Direction: Northbound
Queue Population: 20 to 30 vpl
Number of Lanes: 2

N

Congestion Type: Mainline Signal Queue
Location: Sycamore Rd
Frequency: Intermittent
Direction: Southbound
Queue Population: 20 to 30 vpl
Number of Lanes: 1

O

Congestion Type: Mainline Signal Queue
Location: Hillcrest Dr
Frequency: Intermittent
Direction: Northbound
Queue Population: 20 to 30 vpl
Number of Lanes: 1

P

Congestion Type: Mainline Signal Queue
Location: Peachtree Industrial Blvd
Frequency: Peak Hour
Direction: Northbound
Queue Population: 20 to 30 vpl
Number of Lanes: 2
Note: Downstream congestion approaching the signal at Hillcrest Dr appeared to exacerbate congestion at Peachtree Industrial Blvd.

Q

Congestion Type: Signal Queues / Platoons
Location: Between Peachtree Industrial Blvd & I-985
Frequency: Intermittent
Direction: Southbound
Queue Population: 20 to 35 vpl
Number of Lanes: 2

R

Congestion Type: Cross Road Signal Queue
Location: Lee St
Frequency: Intermittent
Direction: Southbound
Queue Population: 20 to 25 vpl
Number of Lanes: 2

S

Congestion Type: Platoons
Location: Approaching SR 324
Frequency: Intermittent
Direction: Southbound
Platoon Population: 25 to 35 vpl
Number of Lanes: 2

T

Congestion Type: Mainline Signal Queue
Location: Rock Springs Rd
Frequency: Intermittent
Direction: Southbound
Queue Population: 20 to 30 vpl
Number of Lanes: 2

U

Congestion Type: Cross Road Signal Queue
Location: Russell Rd
Frequency: Intermittent
Direction: Eastbound
Queue Population: 20 to 30 vpl
Number of Lanes: 1

V

Congestion Type: Mainline Signal Queue
Location: SR 316
Frequency: Most Observations
Direction: Southbound
Queue Population: 20 to 50 vpl
Number of Lanes: 2

W

Congestion Type: Mainline Signal Queue
Location: SR 316
Frequency: Most Observations
Direction: Northbound
Queue Population: 20 to 50 vpl
Number of Lanes: 2

X

Congestion Type: Mainline Signal Queue
Location: Hurricane Shoals Rd
Frequency: Peak Hour
Direction: Northbound
Queue Population: 30 to 50 vpl
Number of Lanes: 2

Y

Congestion Type: Cross Road Signal Queue
Location: Hurricane Shoals Rd
Frequency: Intermittent
Direction: Eastbound
Queue Population: 20 to 40 vpl
Number of Lanes: 1

Z

Congestion Type: Platoons
Location: Between Plantation Blvd and SR 84
Frequency: Intermittent
Direction: Southbound
Platoon Population: 25 to 40 vpl
Number of Lanes: 2

AA

Congestion Type: Platoons
Location: Between Cooper Rd and Hope Hollow Rd
Frequency: Intermittent
Direction: Southbound
Platoon Population: 25 to 40 vpl
Number of Lanes: 1

SA

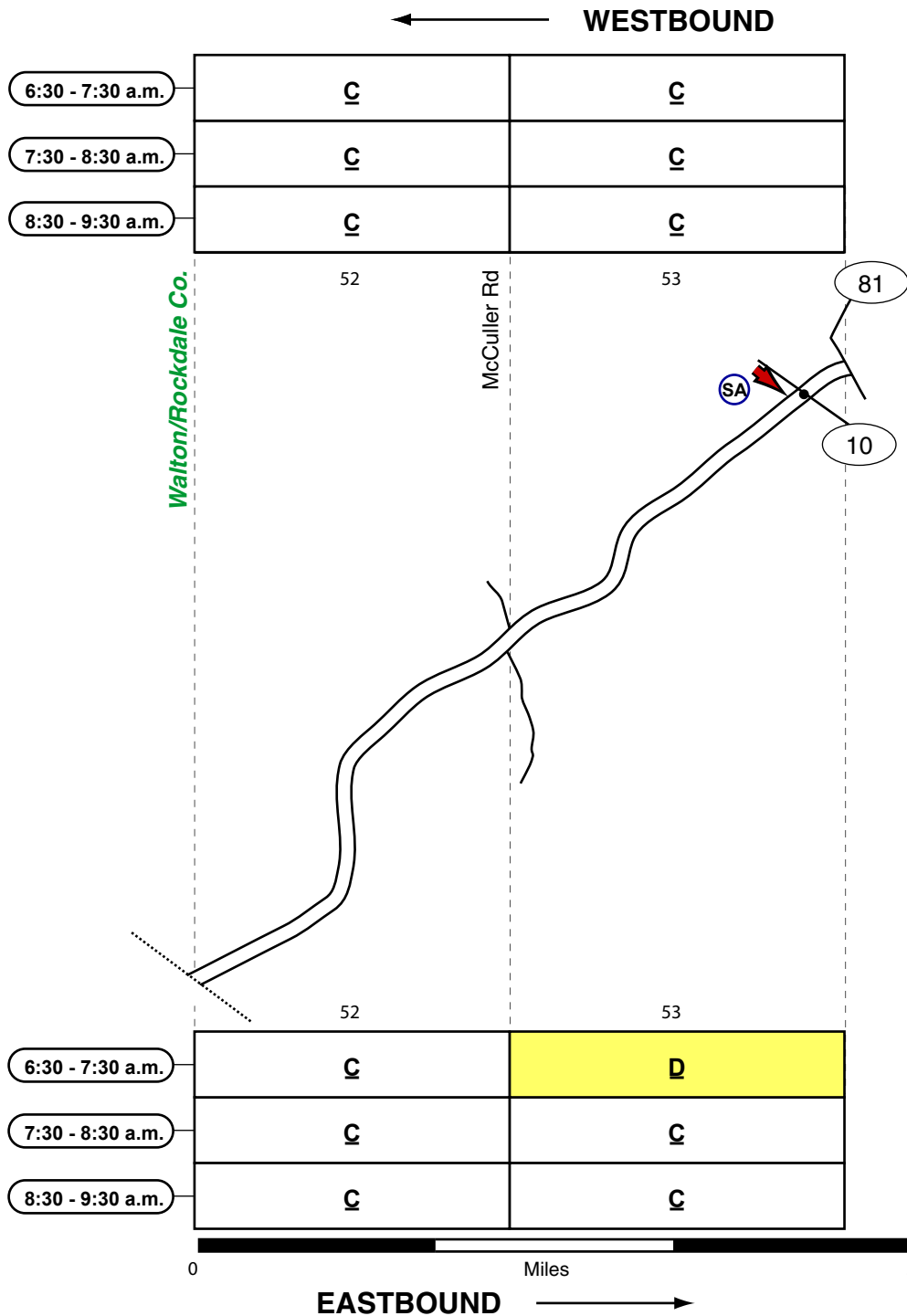
Congestion Type: Surveyed Cross Road Signal Queue
Location: SR 316
Frequency: Most Observations
Direction: Westbound
Queue Population: 20 to 60 vpl
Number of Lanes: 2
Note: During some observations, congestion backed through the upstream signal at Collins Hill Rd.

SB

Congestion Type: Surveyed Cross Road Signal Queue
Location: SR 316
Frequency: Most Observations
Direction: Eastbound
Queue Population: 20 to 70 vpl
Number of Lanes: 2

Spring/Fall 2010

SR 20 (Walton County) - Morning

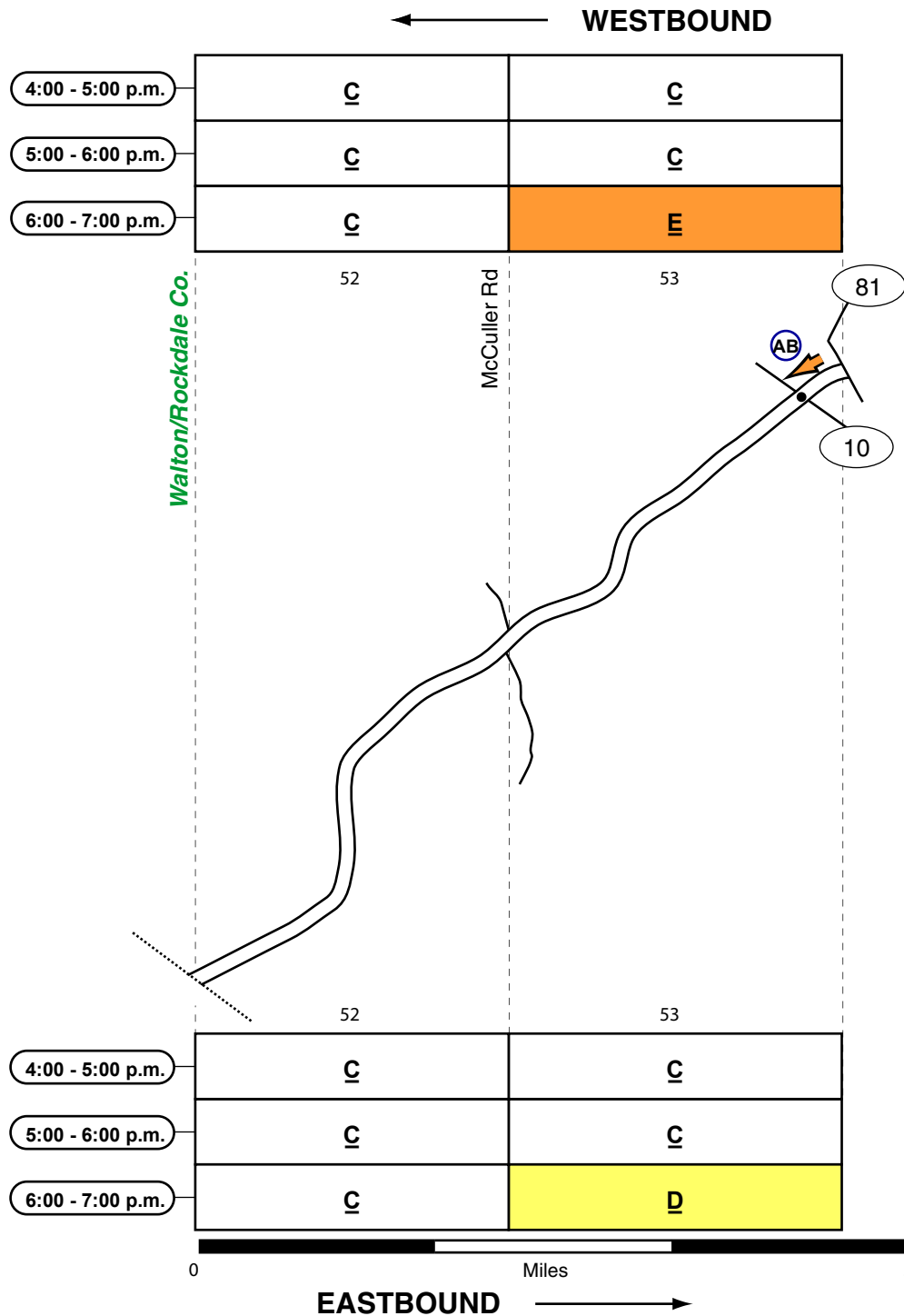


SA
Congestion Type: Surveyed Cross Road
Signal Queue
Location: SR 10 / US 78
Frequency: Intermittent
Direction: Southbound
Queue Population: 20 to 30 vpl
Number of Lanes: 1

Arterial LOS Legend

| A | B | C | D | E | F |
|------------|-------|----------|-------|-----------|--------|
| Very Light | Light | Moderate | Heavy | Congested | Severe |

SR 20 (Walton County) - Evening



AB

Congestion Type: Mainline Signal Queue

Location: SR 10 / US 78

Frequency: Intermittent

Direction: Southbound

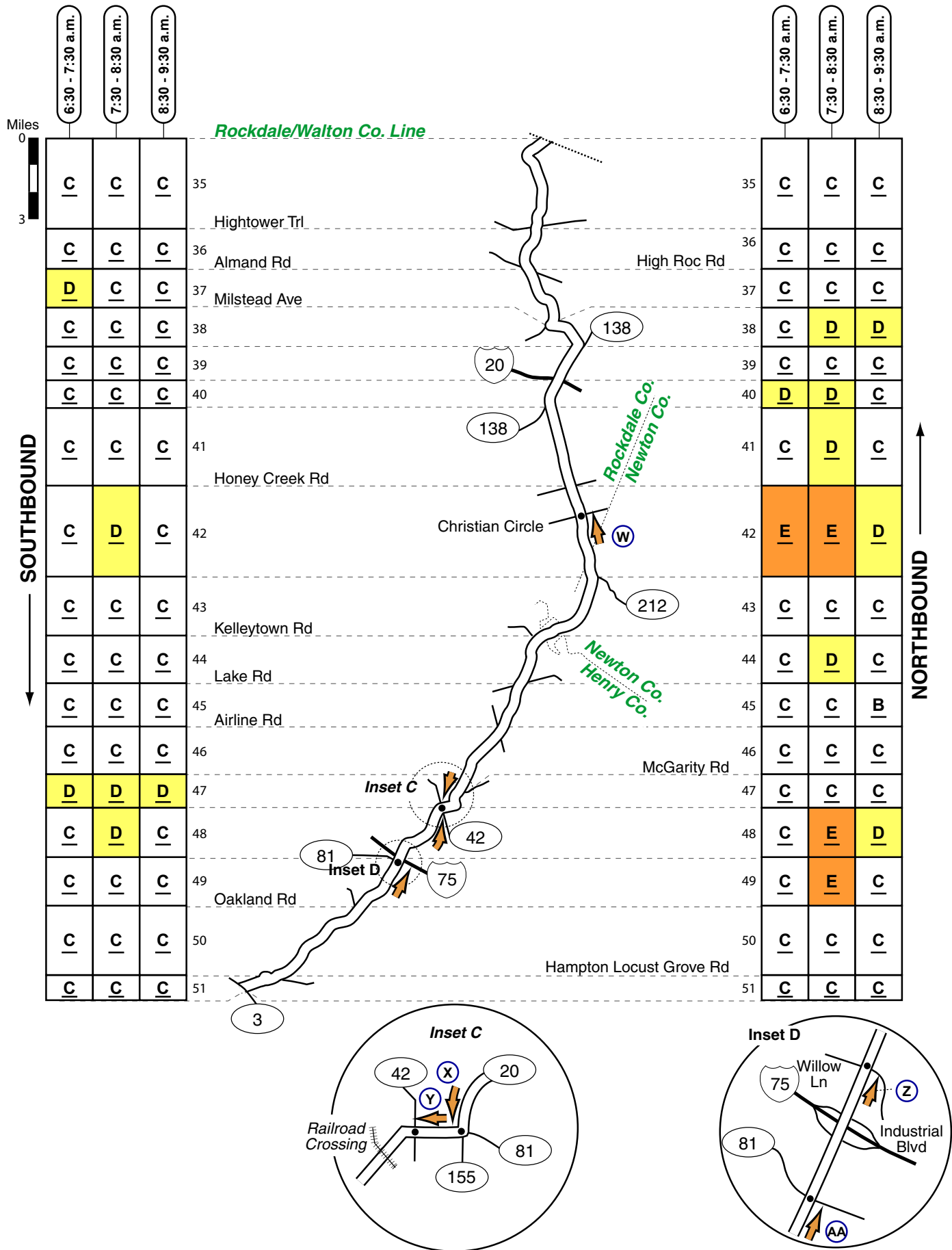
Queue Population: 20 to 30 vpl

Number of Lanes: 1

Arterial LOS Legend

| | | | | | |
|------------|----------|----------|----------|-----------|----------|
| <u>A</u> | <u>B</u> | <u>C</u> | <u>D</u> | <u>E</u> | <u>F</u> |
| Very Light | Light | Moderate | Heavy | Congested | Severe |

SR 20 (Rockdale/Newton & Henry Counties) - Morning



SR 20 (Rockdale/Newton & Henry Counties) - Morning

W

Congestion Type: Mainline Signal Queue

Location: Christian Circle

Frequency: Intermittent

Direction: Northbound

Queue Population: 20 to 30 vpl

Number of Lanes: 1

X

Congestion Type: Mainline Signal Queue

Location: SR 81

Frequency: Intermittent

Direction: Southbound

Queue Population: 20 to 25 vpl

Number of Lanes: 1

Y

Congestion Type: Mainline Signal Queue

Location: SR 42

Frequency: Intermittent

Direction: Westbound

Queue Population: 20 to 30 vpl

Number of Lanes: 1

Note: The head of the queue was found in the one thru-lane at the signal

Z

Congestion Type: Mainline Signal Queue

Location: Industrial Blvd / Willow Ln

Frequency: Intermittent

Direction: Northbound

Queue Population: 20 to 25 vpl

Number of Lanes: 1

AA

Congestion Type: Mainline Signal Queue

Location: SR 81

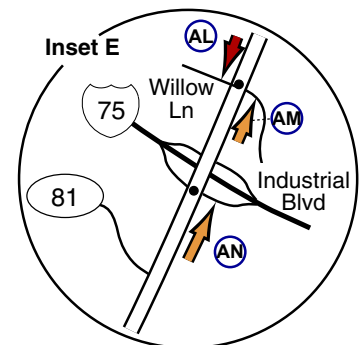
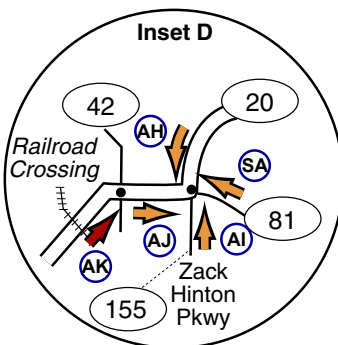
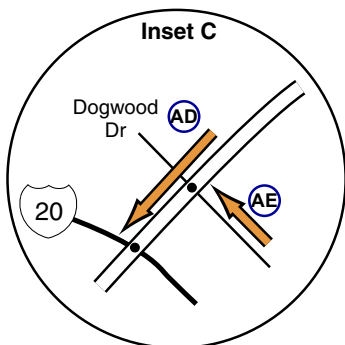
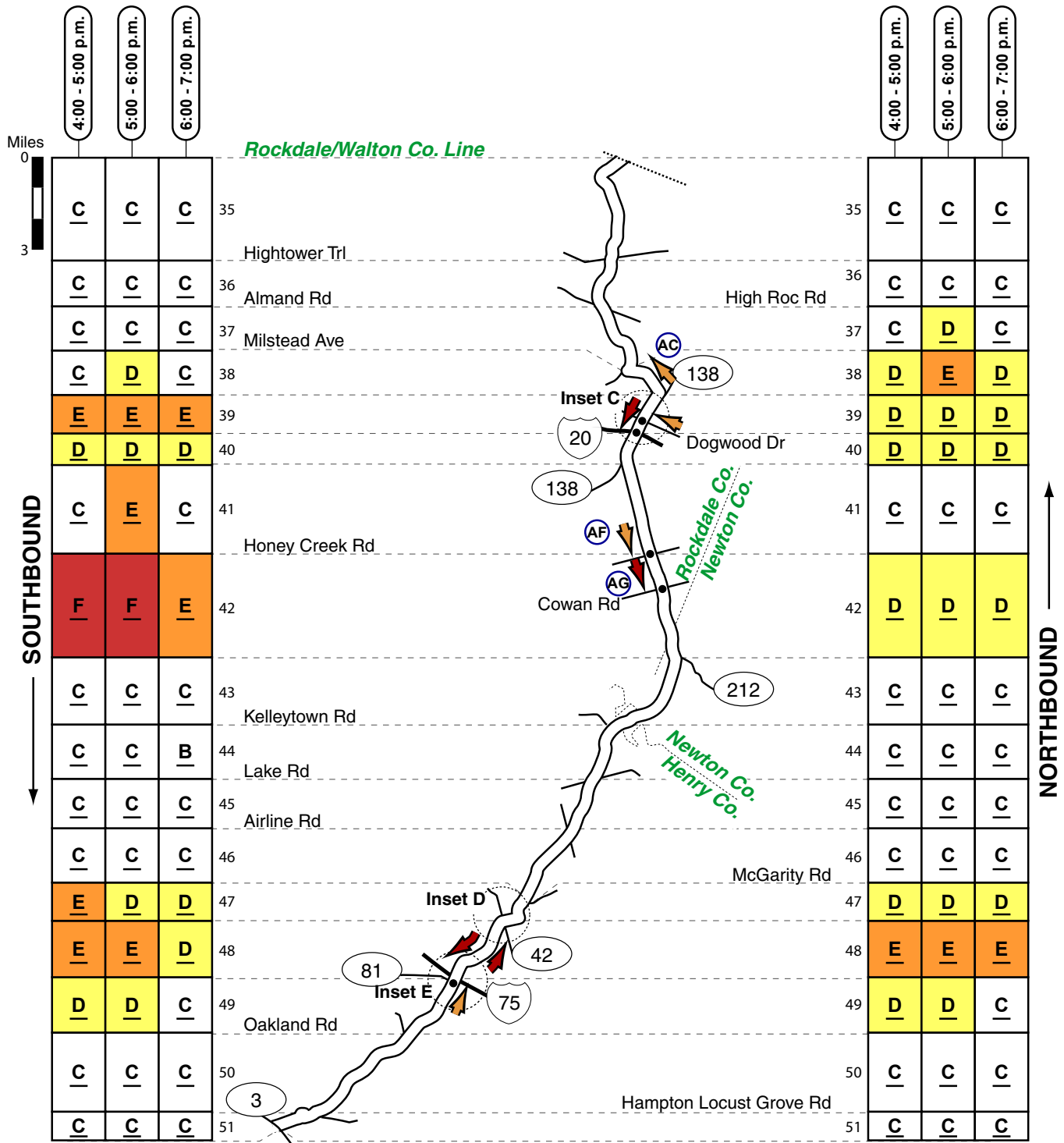
Frequency: Intermittent

Direction: Northbound

Queue Population: 20 to 30 vpl

Number of Lanes: 2

SR 20 (Rockdale/Newton & Henry Counties) - Evening



Arterial LOS Legend

| A | B | C | D | E | F |
|------------|-------|----------|-------|-----------|--------|
| Very Light | Light | Moderate | Heavy | Congested | Severe |

SR 20 (Rockdale/Newton & Henry Counties) - Evening**AC**

Congestion Type: Platoons
Location: Between SR 138 & Milstead Ave
Frequency: Intermittent
Direction: Northbound
Platoon Population: 20 to 30 vpl
Number of Lanes: 1

AD

Congestion Type: Mainline Signal Queue
Location: I-20
Frequency: Intermittent
Direction: Southbound
Queue Population: 20 to 45 vpl
Number of Lanes: 2
Note: When congested, the queue at I-20 typically extended back through the upstream signal at Dogwood Dr.

AE

Congestion Type: Cross Road Signal Queue
Location: Dogwood Dr
Frequency: Intermittent
Direction: Westbound
Queue Population: 20 to 30 vpl
Number of Lanes: 2
Note: When congested, vehicles were queued in the two dedicated left-turn lanes.

AF

Congestion Type: Mainline Signal Queue
Location: Honey Creek Rd
Frequency: Intermittent
Direction: Southbound
Queue Population: 20 to 35 vpl
Number of Lanes: 2
Note: Downstream congestion (signal queue at Cowan Rd) may have exacerbated congestion at Honey Creek Rd.

AG

Congestion Type: Mainline Signal Queue
Location: Cowan Rd
Frequency: Most Observations
Direction: Southbound
Queue Population: 20 to 70 vpl
Number of Lanes: 1
Note: During the peak period, congestion typically extended back to the upstream signal at Honey Creek Rd.

AH

Congestion Type: Mainline Signal Queue
Location: SR 81
Frequency: Intermittent
Direction: Southbound
Queue Population: 20 to 35 vpl
Number of Lanes: 1

AI

Congestion Type: Mainline Signal Queue
Location: SR 155 (Zach Hinton Pkwy)
Frequency: Intermittent
Direction: Northbound
Queue Population: 20 to 35 vpl
Number of Lanes: 2

AJ

Congestion Type: Mainline Signal Queue
Location: SR 155 (Zack Hinton Parkway)
Frequency: Intermittent
Direction: Northbound
Queue Population: 20 to 25 vpl
Number of Lanes: 1

AK

Congestion Type: Mainline Signal Queue
Location: SR 42
Frequency: Most Observations
Direction: Northbound
Queue Population: 20 to 40 vpl
Number of Lanes: 1

AL

Congestion Type: Mainline Signal Queue
Location: Willow Ln
Frequency: Most Observations
Direction: Southbound
Queue Population: 20 to 30 vpl
Number of Lanes: 2

AM

Congestion Type: Mainline Signal Queue
Location: Industrial Blvd / Willow Ln
Frequency: Intermittent
Direction: Northbound
Queue Population: 20 to 40 vpl
Number of Lanes: 1

AN

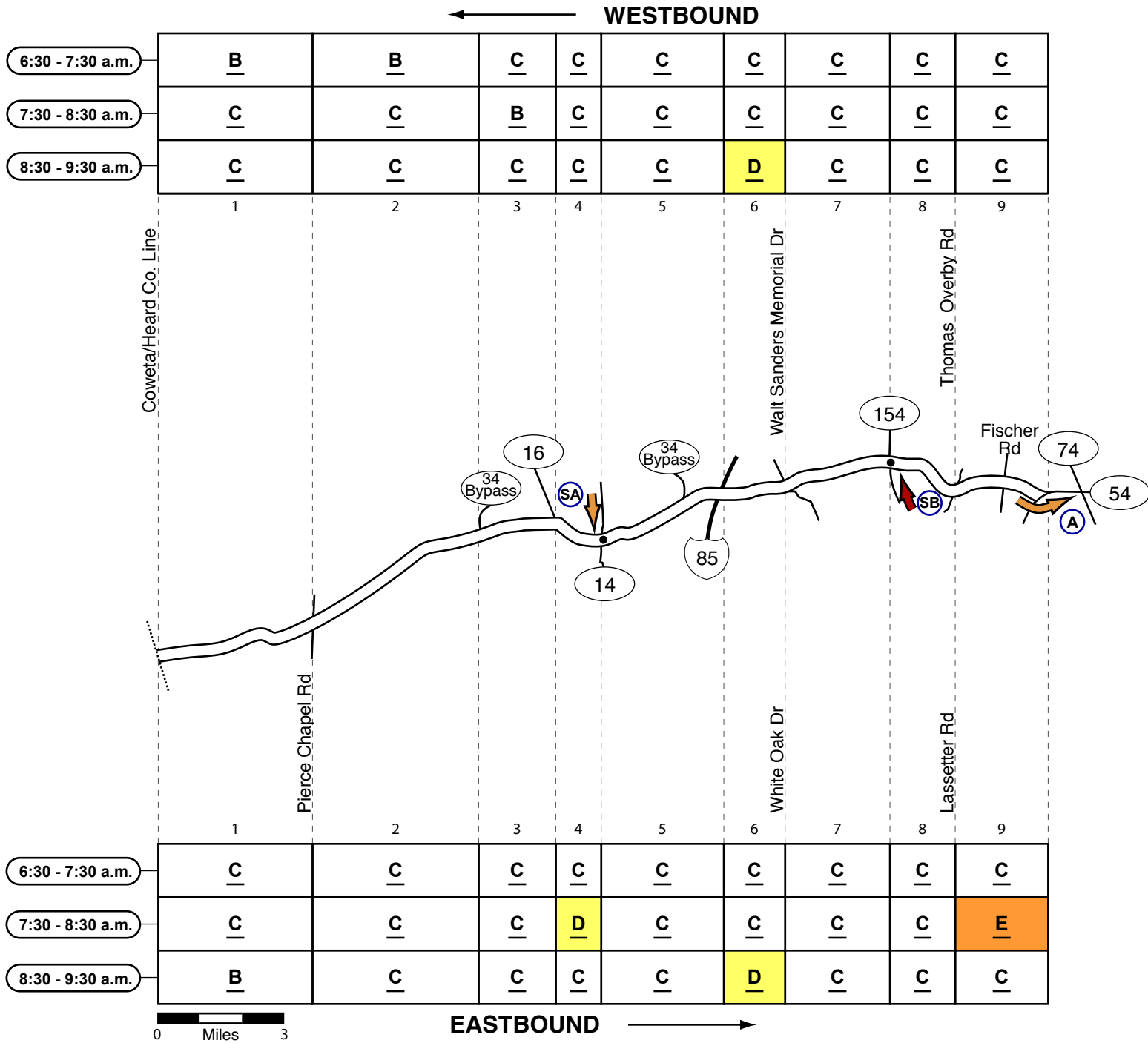
Congestion Type: Mainline Signal Queue
Location: I-75
Frequency: Intermittent
Direction: Northbound
Queue Population: 20 to 30 vpl
Number of Lanes: 2

SA

Congestion Type: Surveyed Cross Road Signal Queue
Location: SR 81
Frequency: Intermittent
Direction: Westbound
Queue Population: 20 to 25 vpl
Number of Lanes: 2

(Blank)

SR 34 (Coweta County) - Morning



A
Congestion Type: Platoons
Location: Between Fischer Rd and SR 74
Frequency: Intermittent
Direction: Eastbound
Platoon Population: 25 to 40 vpl
Number of Lanes: 2

SA
Congestion Type: Surveyed Cross Road Signal Queue
Location: SR 14
Frequency: Intermittent
Direction: Southbound
Queue Population: 20 to 25 vpl
Number of Lanes: 1

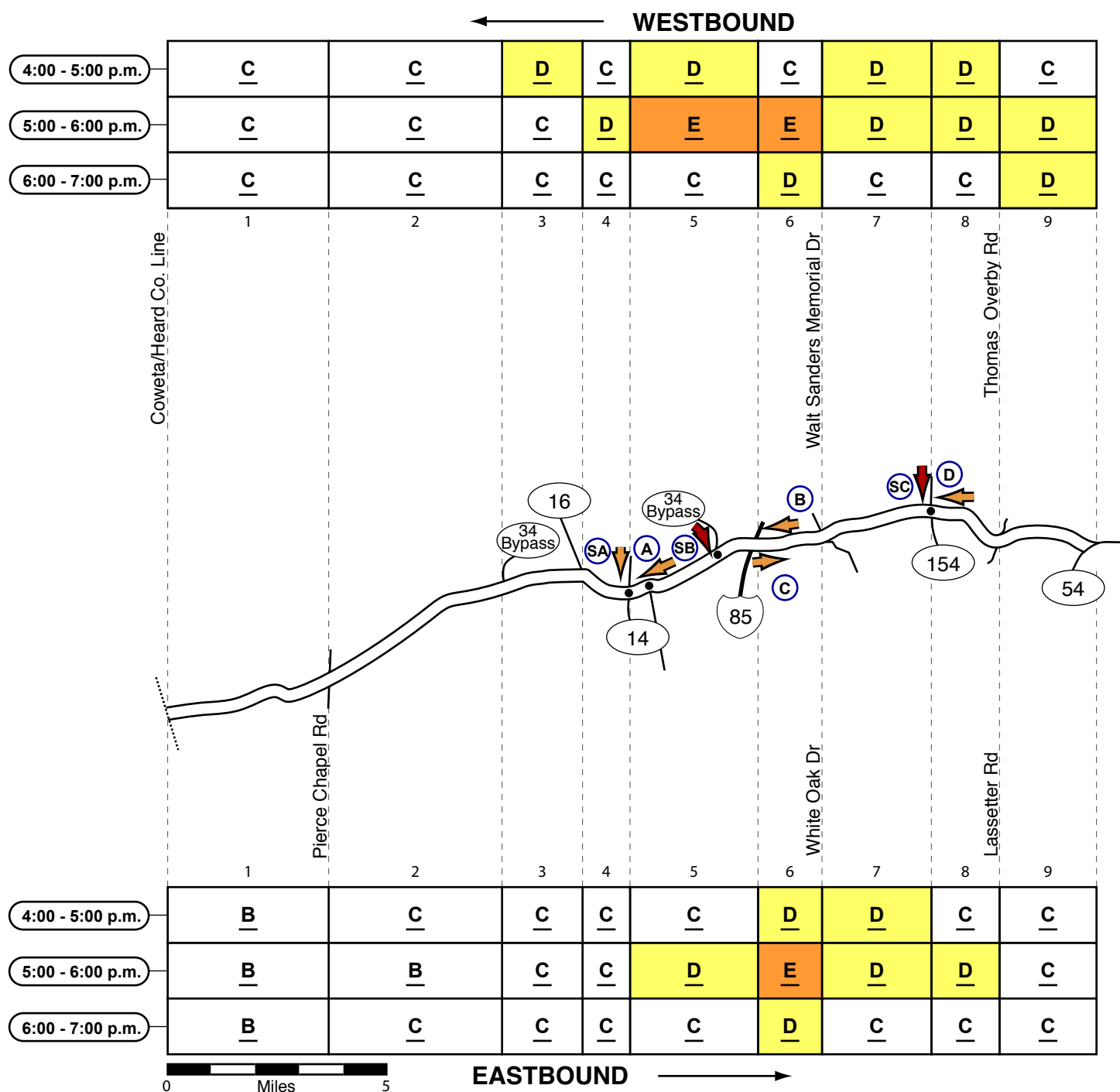
SB
Congestion Type: Surveyed Cross Road Signal Queue
Location: SR 154
Frequency: Peak hour
Direction: Northbound
Queue Population: 20 to 30 vpl
Number of Lanes: 1

Arterial LOS Legend

| A | B | C | D | E | F |
|------------|-------|----------|-------|-----------|--------|
| Very Light | Light | Moderate | Heavy | Congested | Severe |

Spring 2010

SR 34 (Coweta County) - Evening



Arterial LOS Legend

| | | | | | |
|------------|----------|----------|----------|-----------|----------|
| <u>A</u> | <u>B</u> | <u>C</u> | <u>D</u> | <u>E</u> | <u>F</u> |
| Very Light | Light | Moderate | Heavy | Congested | Severe |

Spring 2010

SR 34 (Coweta County) - Evening

A

Congestion Type: Mainline Signal Queue
Location: SR 14 & US 27/29
Frequency: Intermittent
Direction: Westbound
Queue Population: 20 to 40 vpl
Number of Lanes: 2

B

Congestion Type: Platoons
Location: Vicinity of I-85
Frequency: Intermittent
Direction: Westbound
Platoon Population: 25 to 40 vpl
Number of Lanes: 2

C

Congestion Type: Platoons
Location: Vicinity of I-85
Frequency: Intermittent
Direction: Eastbound
Platoon Population: 20 to 40 vpl
Number of Lanes: 3

D

Congestion Type: Mainline Signal Queue/Platoons
Location: SR 154
Frequency: Intermittent
Direction: Westbound
Queue Population: 20 to 30 vpl
Number of Lanes: 2

SA

Congestion Type: Surveyed Cross Road Signal Queue
Location: SR 14
Frequency: Intermittent
Direction: Southbound
Queue Population: 20 to 25 vpl
Number of Lanes: 1

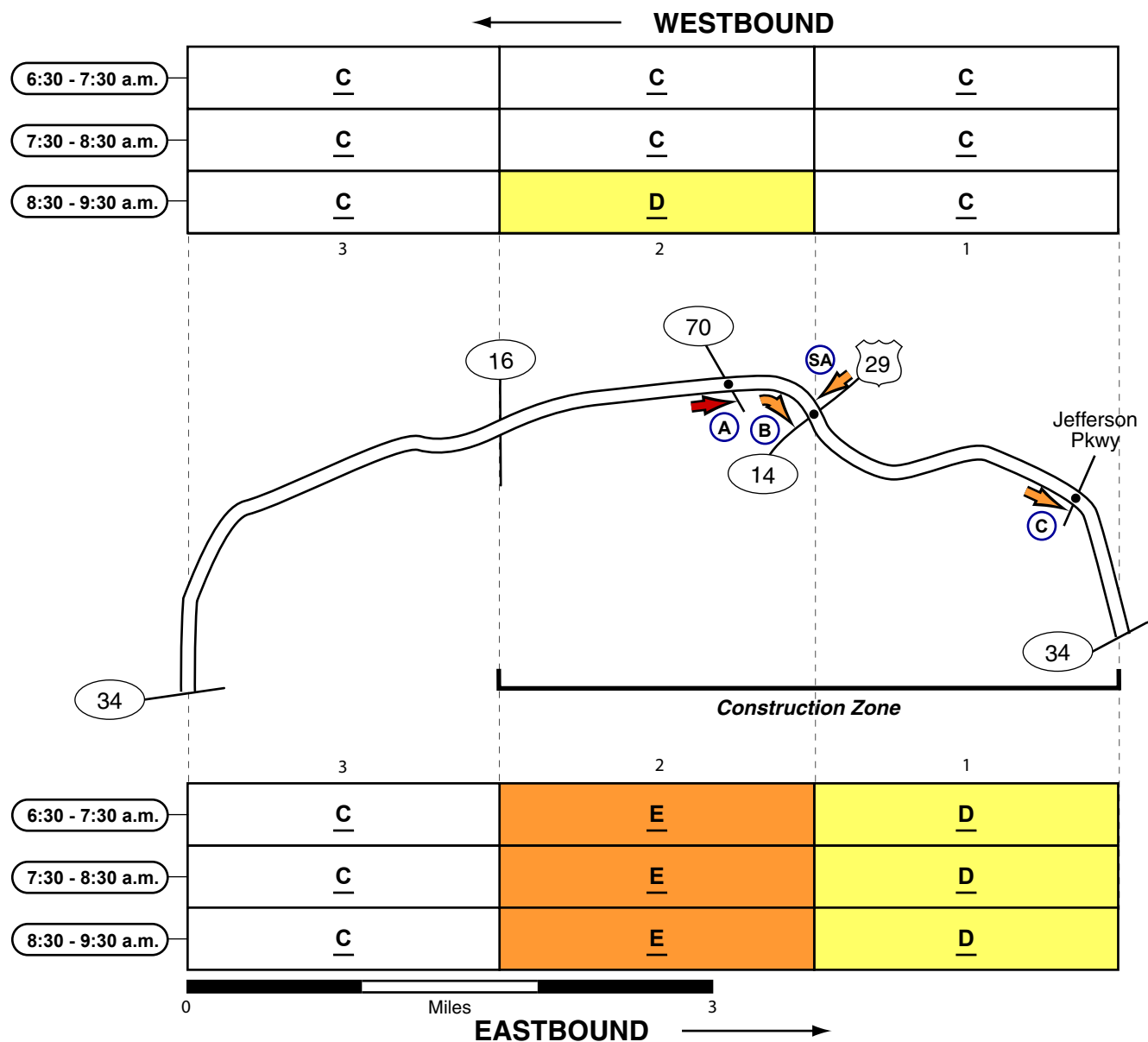
SB

Congestion Type: Surveyed Cross Road Signal Queue
Location: SR 34 Bypass
Frequency: Peak Hour
Direction: Eastbound
Queue Population: 30 to 50 vpl
Number of Lanes: 1

SC

Congestion Type: Surveyed Cross Road Signal Queue
Location: SR 154
Frequency: Peak hour
Direction: Southbound
Queue Population: 20 to 50 vpl
Number of Lanes: 1

Spring 2010

SR 34 Bypass (Coweta County) - Morning**A**

Congestion Type: Mainline Signal Queue

Location: SR 70

Frequency: Peak Hour

Direction: Eastbound

Queue Population: 20 to 40 vpl

Number of Lanes: 1

Note: SR 34 Bypass between SR 34 and SR 16 to the west was under construction during the 2010 aerial survey; it appeared the roadway was being widened.

B

Congestion Type: Mainline Signal Queue

Location: SR 14

Frequency: Intermittent

Direction: Eastbound

Queue Population: 20 to 35 vpl

Number of Lanes: 1

C

Congestion Type: Mainline Signal Queue

Location: Jefferson Parkway

Frequency: Intermittent

Direction: Eastbound

Queue Population: 20 to 30 vpl

Number of Lanes: 1

SA

Congestion Type: Surveyed Cross Road Signal Queue

Location: SR 14

Frequency: Intermittent

Direction: Southbound

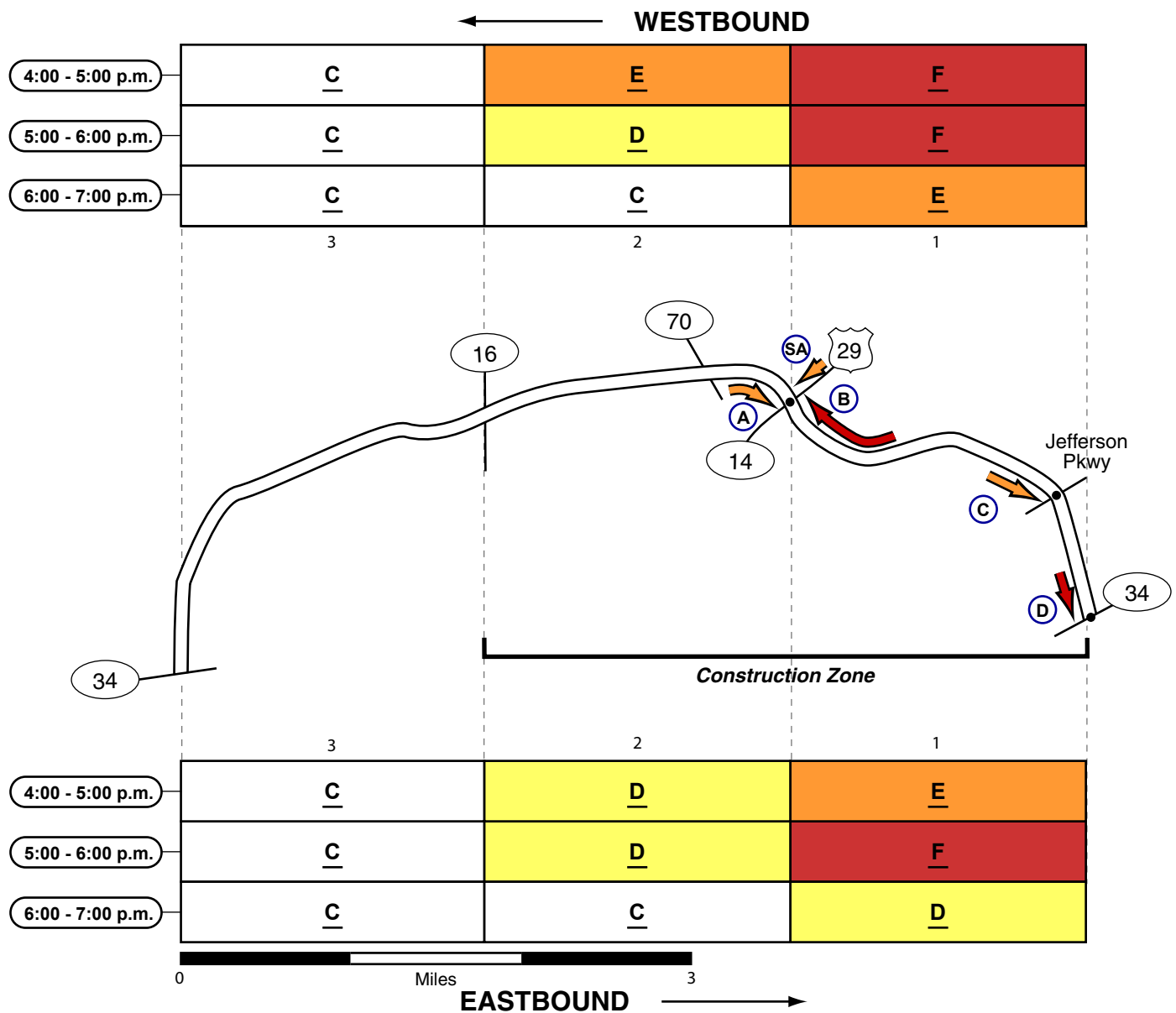
Queue Population: 20 to 25 vpl

Number of Lanes: 1

Arterial LOS Legend

| <u>A</u> | <u>B</u> | <u>C</u> | <u>D</u> | <u>E</u> | <u>F</u> |
|------------|----------|----------|----------|-----------|----------|
| Very Light | Light | Moderate | Heavy | Congested | Severe |

SR 34 Bypass (Coweta County) - Evening



A
 Congestion Type: Mainline Signal Queue/Platoons
 Location: SR 14
 Frequency: Intermittent
 Direction: Eastbound
 Queue Population: 20 to 35 vpl
 Number of Lanes: 1

B
 Congestion Type: Mainline Signal Queue
 Location: SR 14
 Frequency: Most observations
 Direction: Westbound
 Queue Population: 20 to 60 vpl
 Number of Lanes: 1
 Note: During one observation, the queue contained approximately 110 vehicles.

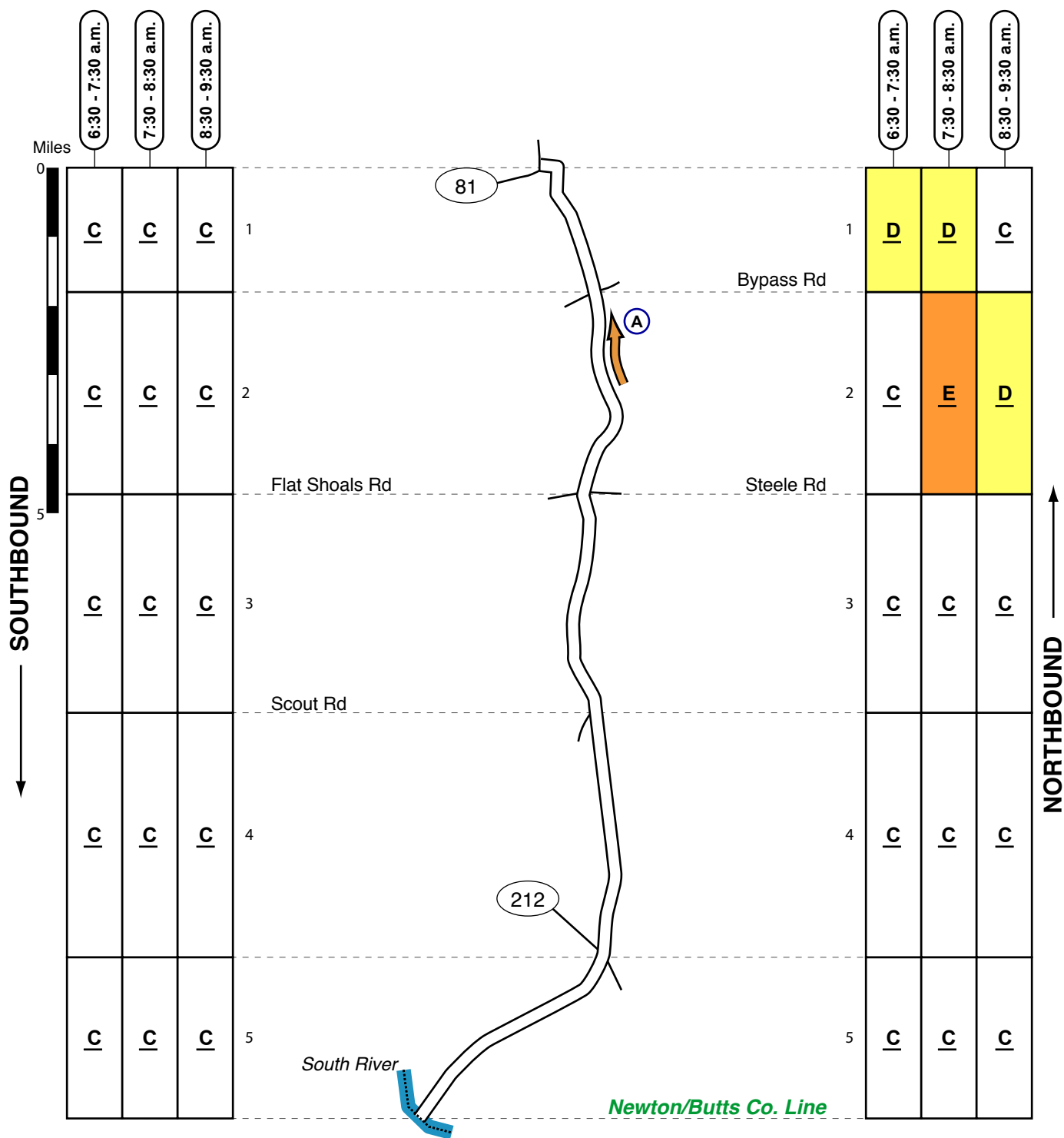
C
 Congestion Type: Mainline Signal Queue
 Location: Jefferson Pkwy
 Frequency: Intermittent
 Direction: Eastbound
 Queue Population: 20 to 30 vpl
 Number of Lanes: 1

D
 Congestion Type: Mainline Signal Queue
 Location: SR 34
 Frequency: Peak Hour
 Direction: Eastbound
 Queue Population: 30 to 50 vpl
 Number of Lanes: 1

SA
 Congestion Type: Surveyed Cross Road
 Signal Queue
 Location: SR 14
 Frequency: Intermittent
 Direction: Southbound
 Queue Population: 20 to 30 vpl
 Number of Lanes: 1

Spring 2010

SR 36 (Newton County) - Morning



A

Congestion Type: Platoons

Location: Between Steele Rd & Bypass Rd

Frequency: Intermittent

Direction: Northbound

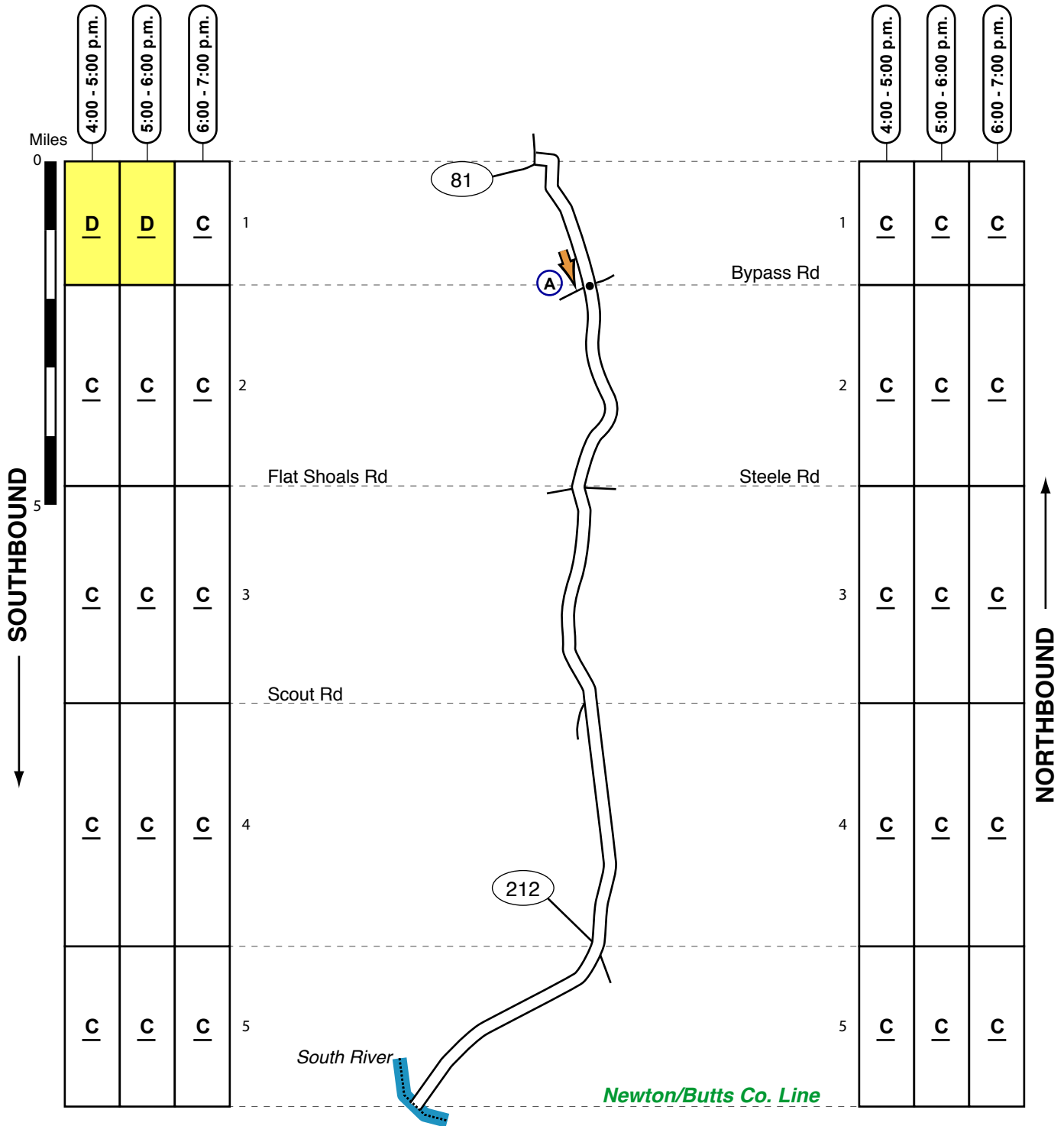
Platoon Population: 25 to 45 vpl

Number of Lanes: 1

Arterial LOS Legend

| A | B | C | D | E | F |
|------------|-------|----------|-------|-----------|--------|
| Very Light | Light | Moderate | Heavy | Congested | Severe |

Spring 2010 SR 36 (Newton County) - Evening

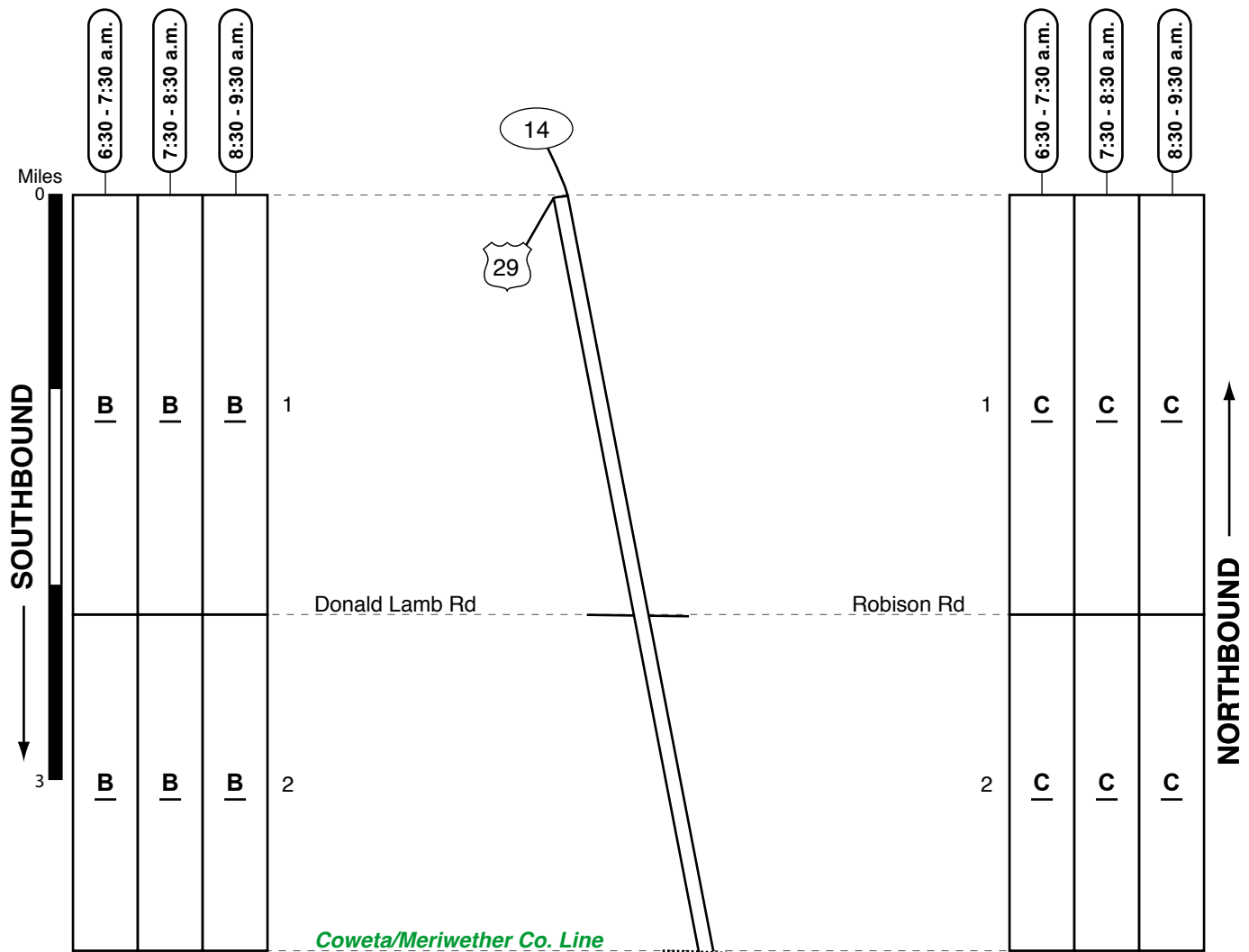


A
Congestion Type: Mainline Signal Queue/Platoons
Location: Bypass Rd
Frequency: One Time Only
Direction: Southbound
Queue Population: 20 to 25 vpl
Number of Lanes: 1

Arterial LOS Legend

| A | B | C | D | E | F |
|------------|-------|----------|-------|-----------|--------|
| Very Light | Light | Moderate | Heavy | Congested | Severe |

SR 41 (Coweta County) - Morning

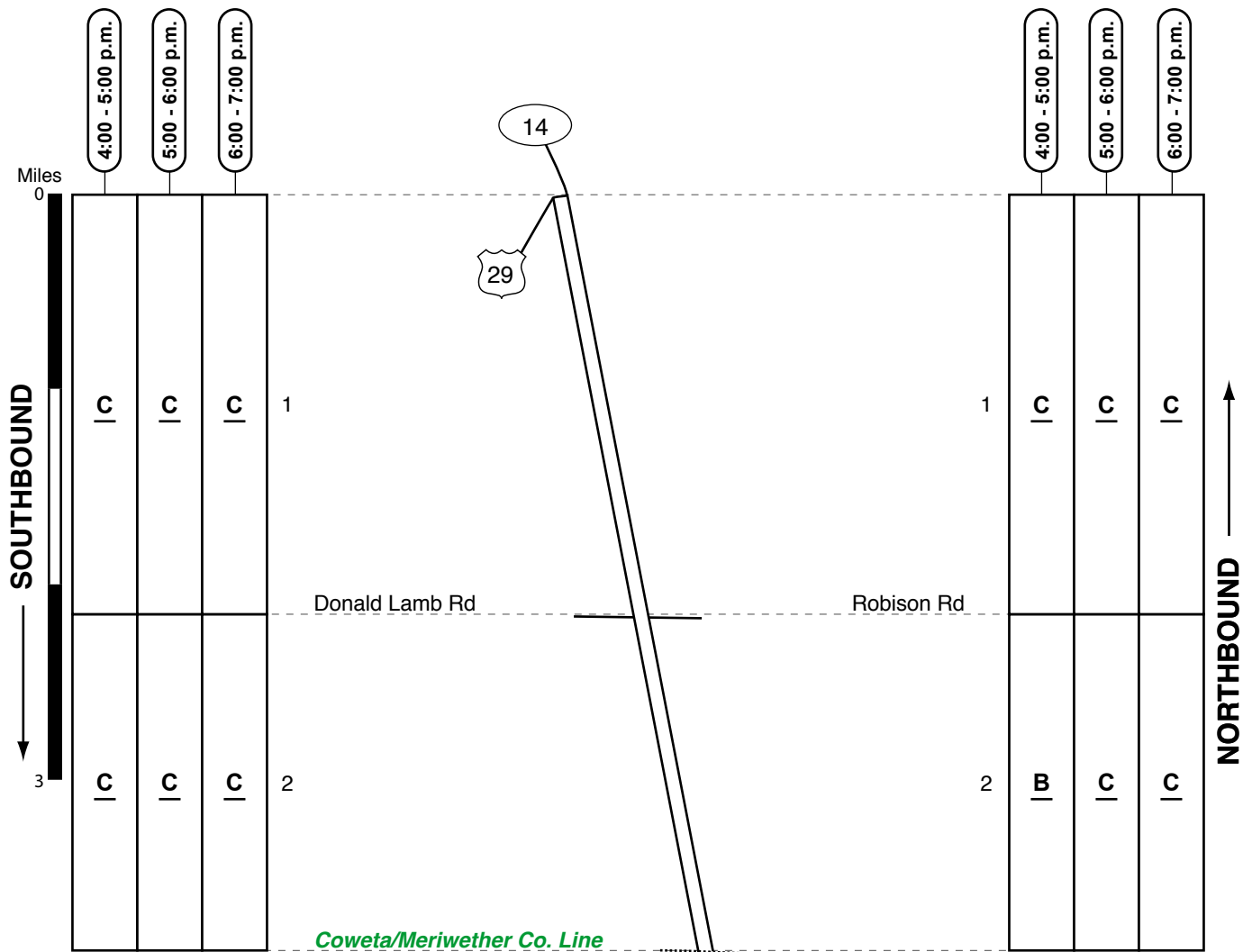


Arterial LOS Legend

| A | B | C | D | E | F |
|------------|-------|----------|-------|-----------|--------|
| Very Light | Light | Moderate | Heavy | Congested | Severe |

Spring 2010

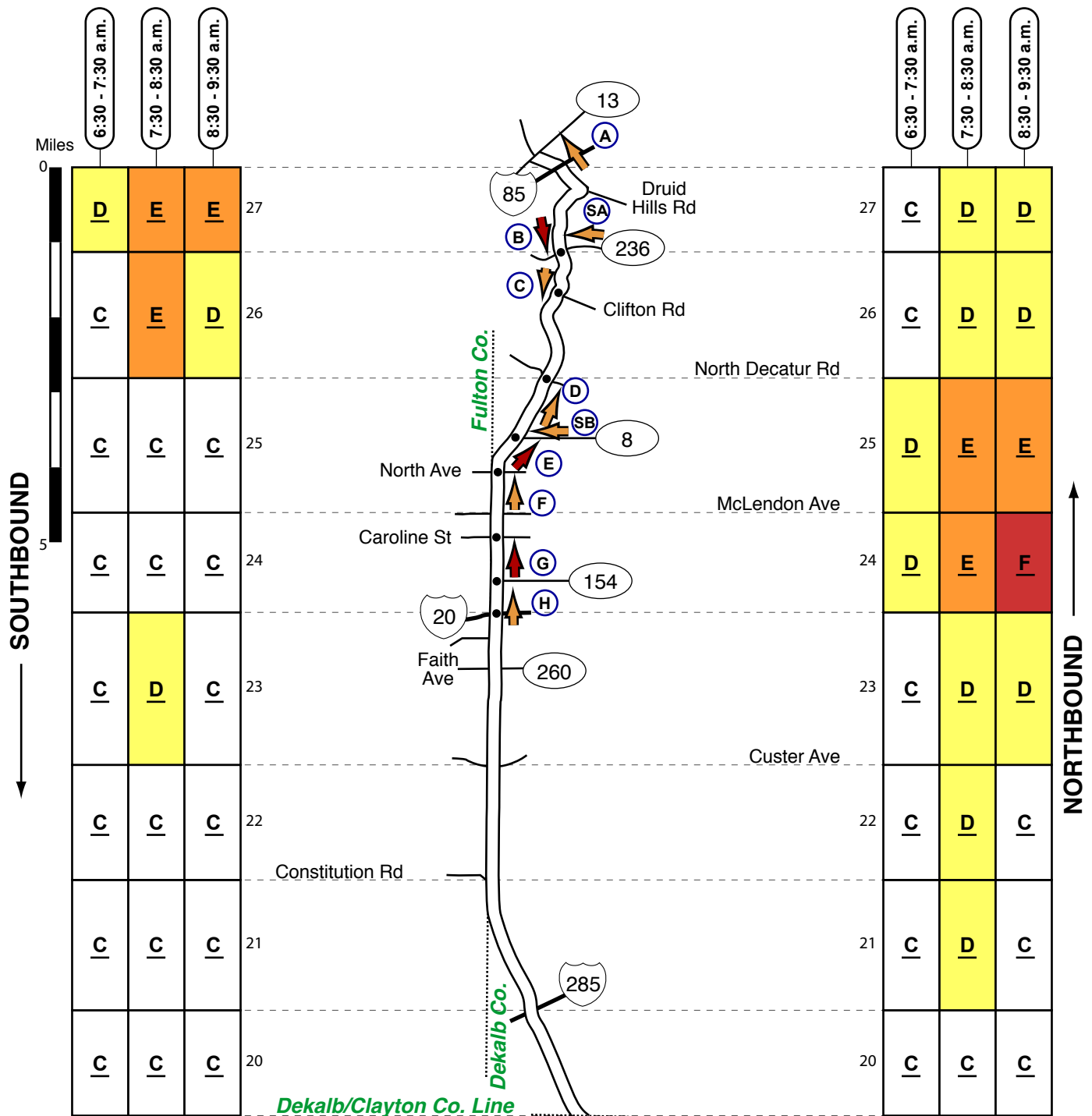
SR 41 (Coweta County) - Evening



Arterial LOS Legend

| A | B | C | D | E | F |
|------------|----------|----------|----------|-----------|----------|
| Very Light | Light | Moderate | Heavy | Congested | Severe |

SR 42 (Fulton & DeKalb Counties) - Morning



SR 42 (Fulton & Dekalb Counties) - Morning

A

Congestion Type: Platoons
 Location: I-85
 Frequency: Intermittent
 Direction: Northbound
 Platoon Population: 25 to 30 vpl
 Number of Lanes: 2

B

Congestion Type: Mainline Signal Queue
 Location: SR 236
 Frequency: Most Observations
 Direction: Southbound
 Queue Population: 20 to 60 vpl
 Number of Lanes: 1

C

Congestion Type: Mainline Signal Queue/Platoons
 Location: Clifton Rd
 Frequency: Intermittent
 Direction: Southbound
 Queue Population: 20 to 30 vpl
 Number of Lanes: 1
 Note: The head of the queue was typically found in the left lane of two at the signal.

D

Congestion Type: Mainline Signal Queue
 Location: North Decatur Rd
 Frequency: Intermittent
 Direction: Northbound
 Queue Population: 20 to 40 vpl
 Number of Lanes: 1

E

Congestion Type: Mainline Signal Queue
 Location: SR 8
 Frequency: Intermittent
 Direction: Northbound
 Queue Population: 20 to 30 vpl
 Number of Lanes: 2

F

Congestion Type: Mainline Signal Queue
 Location: North Ave
 Frequency: Intermittent
 Direction: Northbound
 Queue Population: 20 to 30 vpl
 Number of Lanes: 2

G

Congestion Type: Mainline Signal Queue
 Location: Caroline St
 Frequency: Peak Hour
 Direction: Northbound
 Queue Population: 20 to 40 vpl
 Number of Lanes: 2

H

Congestion Type: Mainline Signal Queue
 Location: SR 154
 Frequency: Intermittent
 Direction: Northbound
 Queue Population: 20 to 30 vpl
 Number of Lanes: 2

SA

Congestion Type: Surveyed Cross Road Signal Queue
 Location: SR 236
 Frequency: Intermittent
 Direction: Westbound
 Queue Population: 20 to 25 vpl
 Number of Lanes: 1

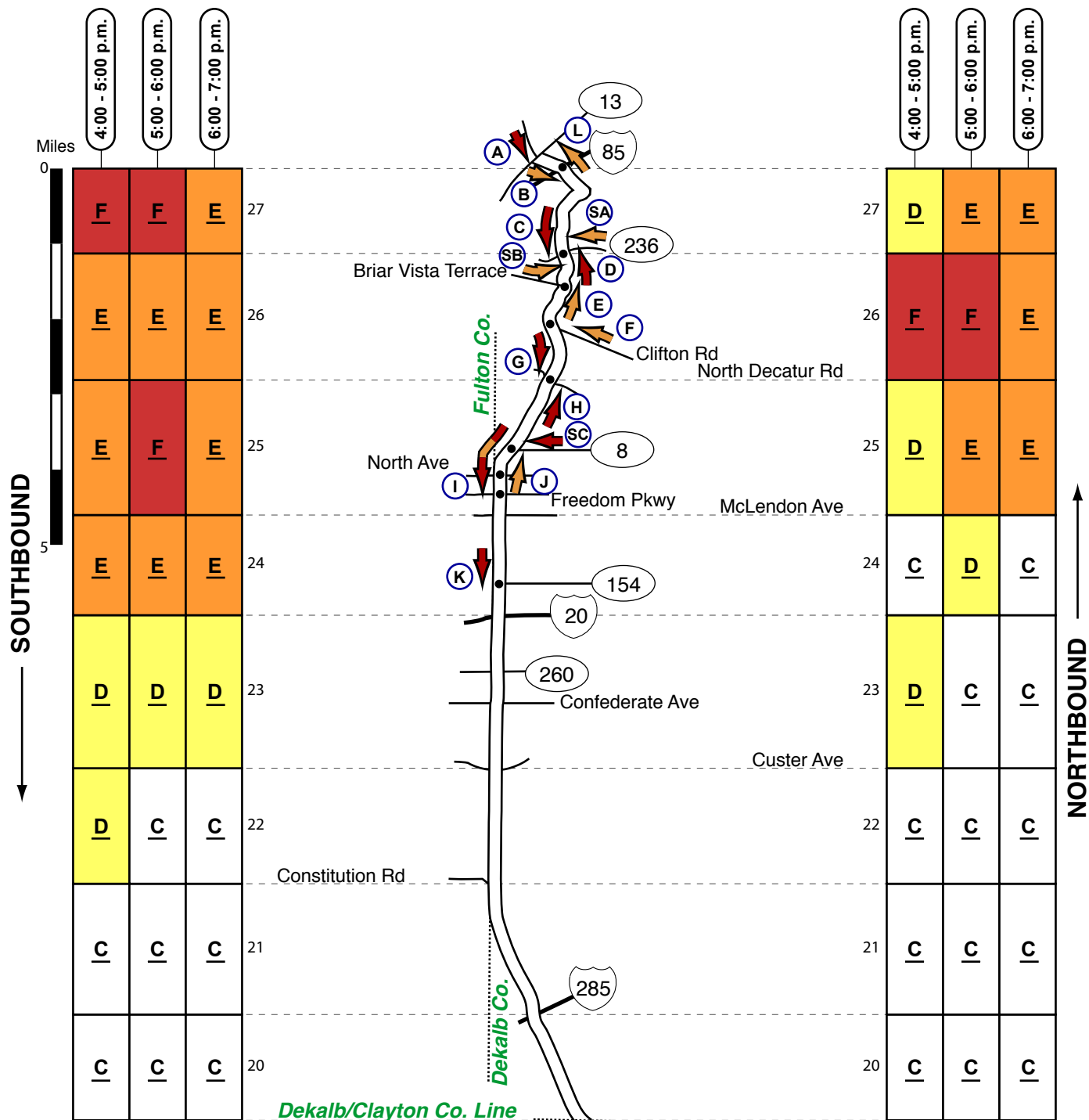
SB

Congestion Type: Surveyed Cross Road Signal Queue
 Location: SR 8
 Frequency: Most Observations
 Direction: Westbound
 Queue Population: 20 to 40 vpl
 Number of Lanes: 2

Arterial LOS Legend

| <u>A</u> | <u>B</u> | <u>C</u> | <u>D</u> | <u>E</u> | <u>F</u> |
|------------|----------|----------|----------|-----------|----------|
| Very Light | Light | Moderate | Heavy | Congested | Severe |

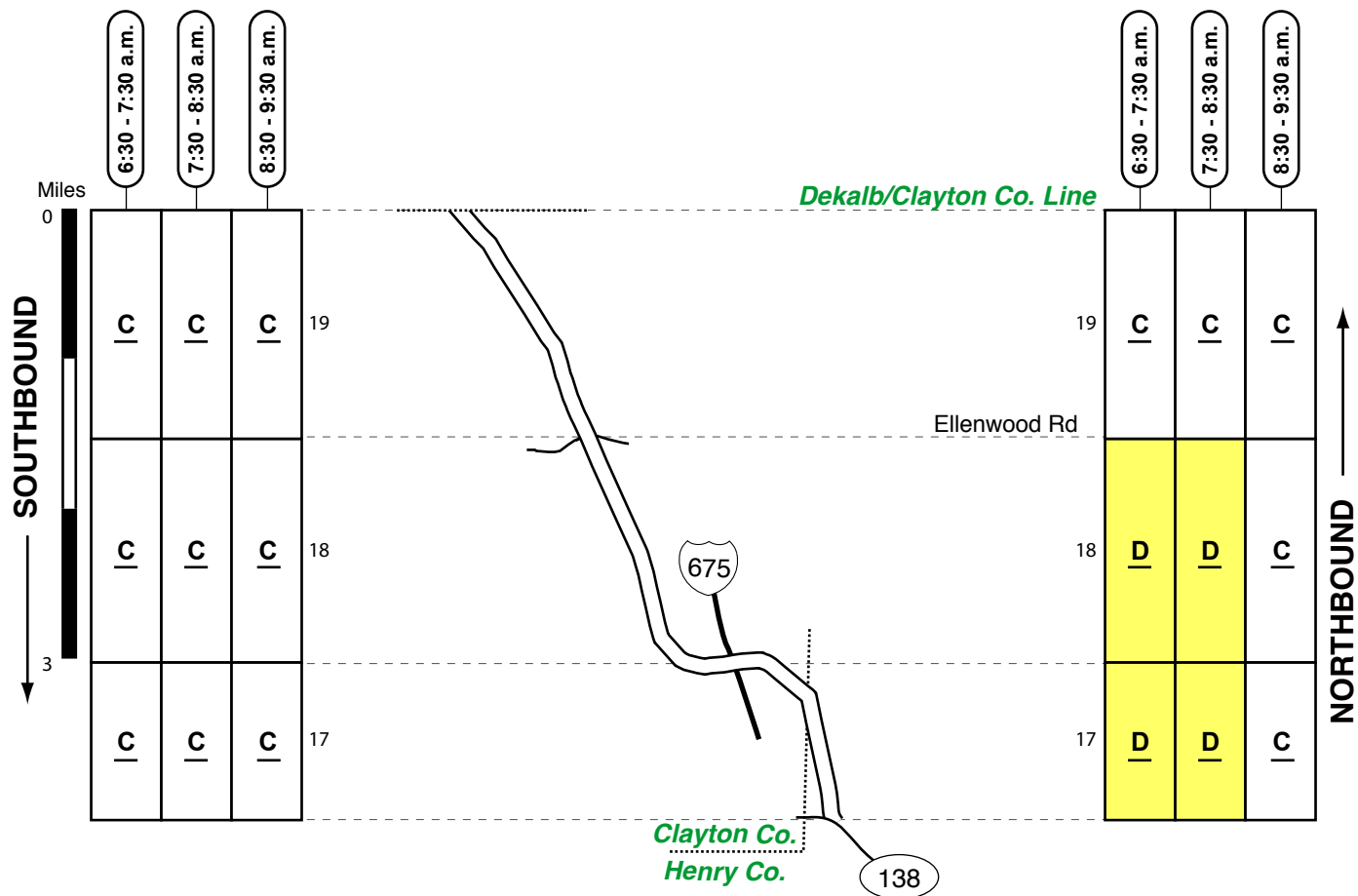
SR 42 (Fulton & DeKalb Counties) - Evening



SR 42 (Fulton & Dekalb Counties) - Evening

| | | |
|---|--|---|
| A Congestion Type: Cross Road Signal Queue Location: Druid Hills Rd Frequency: Most Observations Direction: Southbound Queue Population: 30 to 60 vpl Number of Lanes: 2 | H Congestion Type: Mainline Signal Queue Location: North Decatur Rd Frequency: Most Observations Direction: Northbound Queue Population: 20 to 25 vpl Number of Lanes: 1 Note: During one observation, the queue contained approximately 60 vehicles. | SA Congestion Type: Surveyed Cross Road Signal Queue Location: SR 236 Frequency: Intermittent Direction: Westbound Queue Population: 20 to 25 vpl Number of Lanes: 1 |
| B Congestion Type: Mainline Signal Queue Location: I-85 Frequency: Intermittent Direction: Southbound Queue Population: 20 to 30 vpl Number of Lanes: 2 | I Congestion Type: Mainline Signal Queue Location: Between North Decatur Rd & McLendon Ave Frequency: Most Observations Direction: Southbound Number of Lanes: 2 | SB Congestion Type: Surveyed Cross Road Signal Queue Location: SR 236 Frequency: Intermittent Direction: Eastbound Queue Population: 20 to 30 vpl Number of Lanes: 1 Note: During one observation, the queue contained approximately 50 vehicles. |
| C Congestion Type: Mainline Signal Queue Location: SR 236 Frequency: Most Observations Direction: Southbound Queue Population: 20 to 70 vpl Number of Lanes: 1 | Note: On one of the four evening surveys, severe southbound congestion was found approaching the signal at SR 8 and continuing south to McLendon Ave (a distance of approximately one mile); similar congestion was found here during the aerial surveys in 2008. During the other three evening surveys in 2010, the primary bottlenecks along this section of SR 42 were found at the signals at North Ave and Freedom Pkwy; queue populations here ranged from approximately 20 to 40 vehicles per lane (two lanes). | SC Congestion Type: Surveyed Cross Road Signal Queue Location: SR 8 Frequency: Most Observations Direction: Westbound Queue Population: 20 to 50 vpl Number of Lanes: 2 |
| D Congestion Type: Mainline Signal Queue Location: SR 236 Frequency: Most Observations Direction: Northbound Queue Population: 20 to 60 vpl Number of Lanes: 1 | J Congestion Type: Mainline Signal Queue Location: SR 8 Frequency: Intermittent Direction: Northbound Queue Population: 20 to 30 vpl Number of Lanes: 2 | |
| E Congestion Type: Mainline Signal Queue Location: Briar Vista Terrace Frequency: Intermittent Direction: Northbound Queue Population: 20 to 30 vpl Number of Lanes: 1 | K Congestion Type: Mainline Signal Queue Location: SR 154 Frequency: Peak Hour Direction: Southbound Queue Population: 20 to 40 vpl Number of Lanes: 2 | |
| F Congestion Type: Cross Road Signal Queue Location: Clifton Rd Frequency: Intermittent Direction: Westbound Queue Population: 20 to 40 vpl Number of Lanes: 1 | L Congestion Type: Platoons Location: SR 236 & SR 13 Frequency: Most Observations Direction: Northbound Queue Population: 25 to 40 vpl Number of Lanes: 2 | |
| G Congestion Type: Mainline Signal Queue Location: North Decatur Rd Frequency: Peak Hour Direction: Southbound Queue Population: 20 to 30 vpl Number of Lanes: 1 | | |

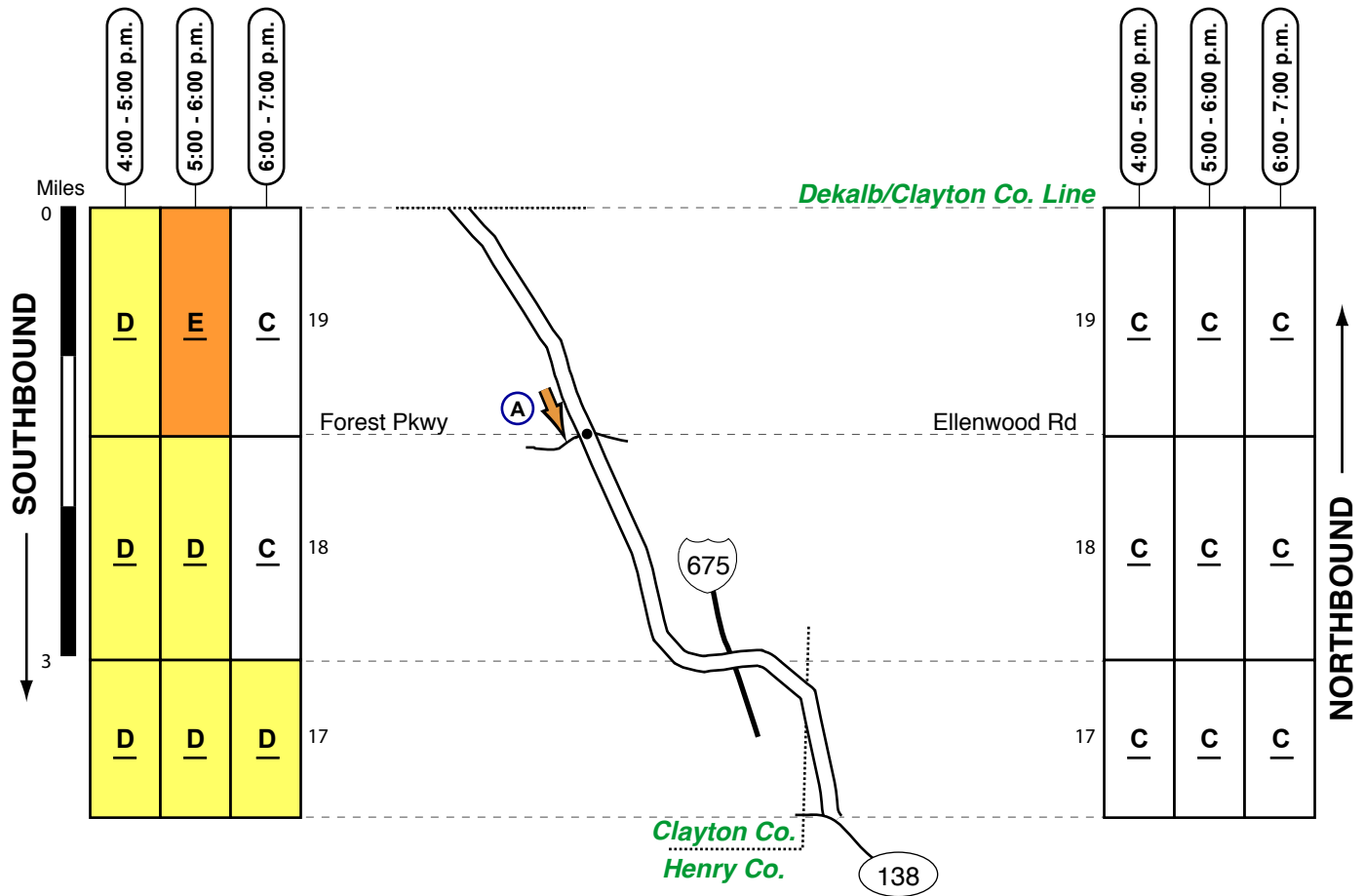
SR 42 (Clayton County) - Morning



Spring 2010

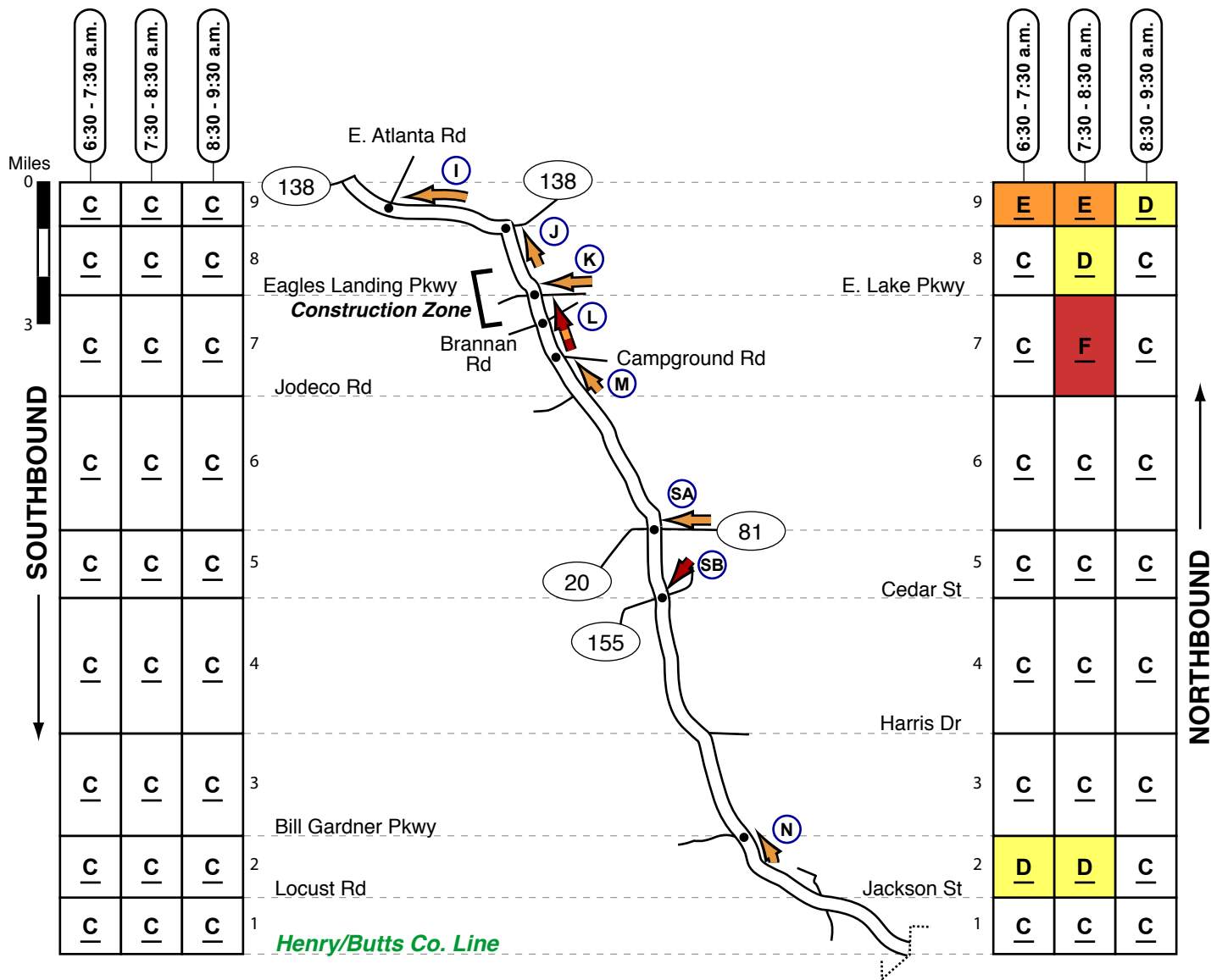
SR 42 (Clayton County) - Evening

PERFORMANCE RATINGS | 143



A
 Congestion Type: Mainline Signal Queue
 Location: Forest Pkwy
 Frequency: Intermittent
 Direction: Southbound
 Queue Population: 20 to 40 vpl
 Number of Lanes: 2

SR 42 (Henry County) - Morning



SR 42 (Henry County) - Morning

I

Congestion Type: Mainline Signal Queue
 Location: E. Atlanta Rd
 Frequency: Intermittent
 Direction: Westbound
 Queue Population: 20 to 40 vpl
 Number of Lanes: 2

J

Congestion Type: Mainline Signal Queue/Platoons
 Location: SR 138
 Frequency: Intermittent
 Direction: Northbound
 Queue Population: 20 to 30 vpl
 Number of Lanes: 1

K

Congestion Type: Cross Road Signal Queue
 Location: E Lake Pkwy
 Frequency: Intermittent
 Direction: Westbound
 Queue Population: 20 to 40 vpl
 Number of Lanes: 1

L

Congestion Type: Left-Turn Queue
 Location: Eagles Landing Parkway
 Frequency: Peak Hour
 Direction: Northbound
 Queue Population: 20 to 100 vpl
 Number of Lanes: 1
 Note: During several observations, congestion in the left-turn bay extended back into the mainline on SR 42 and through the upstream signal at Brannan Rd. During the 2010 survey, construction was ongoing on three of the four approaches to the intersection at SR 42 and Eagles Landing Parkway (NB, SB and EB).

M

Congestion Type: Mainline Signal Queue/Platoons
 Location: Campground Rd
 Frequency: Intermittent
 Direction: Northbound
 Queue Population: 20 to 30 vpl
 Number of Lanes: 1

N

Congestion Type: Mainline Signal Queue/Platoons
 Location: Bill Gardner Parkway
 Frequency: One time only
 Direction: Northbound
 Queue Population: 30 to 40 vpl
 Number of Lanes: 1

SA

Congestion Type: Surveyed Cross Road Signal Queue
 Location: SR 81
 Frequency: Intermittent
 Direction: Westbound
 Queue Population: 20 to 30 vpl
 Number of Lanes: 1
 Note: The head of the queue was found in the one thru-lane at the signal

SB

Congestion Type: Surveyed Cross Road Signal Queue
 Location: SR 155
 Frequency: Peak Hour
 Direction: Southbound
 Queue Population: 20 to 45 vpl
 Number of Lanes: 1

Arterial LOS Legend

| A | B | C | D | E | F |
|------------|-------|----------|-------|-----------|--------|
| Very Light | Light | Moderate | Heavy | Congested | Severe |



| | | | | | |
|------------|----------|----------|----------|-----------|----------|
| <u>A</u> | <u>B</u> | <u>C</u> | <u>D</u> | <u>E</u> | <u>F</u> |
| Very Light | Light | Moderate | Heavy | Congested | Severe |

SR 42 (Henry County) - Evening

L

Congestion Type: Mainline Signal Queue
 Location: Shields Rd
 Frequency: Intermittent
 Direction: Eastbound
 Queue Population: 20 to 30 vpl
 Number of Lanes: 2

M

Congestion Type: Mainline Signal Queue
 Location: Rock Quarry Rd
 Frequency: Intermittent
 Direction: Eastbound
 Queue Population: 20 to 30 vpl
 Number of Lanes: 2

N

Congestion Type: Mainline Signal Queue
 Location: SR 138
 Frequency: Intermittent
 Direction: Eastbound
 Queue Population: 20 to 30 vpl
 Number of Lanes: 2

O

Congestion Type: Mainline Signal Queue/Platoons
 Location: Eagles Landing Parkway
 Frequency: Intermittent
 Direction: Southbound
 Queue Population: 20 to 35 vpl
 Number of Lanes: 1
 Note: During the 2010 survey, construction was ongoing on three of the four approaches to the intersection at SR 42 and Eagles Landing Parkway (NB, SB and EB).

P

Congestion Type: Cross Road Signal Queue
 Location: Eagles Landing Pkwy
 Frequency: Most Observations
 Direction: Eastbound
 Queue Population: 20 to 100 vpl
 Number of Lanes: 1
 Note: During the 2010 survey, construction was ongoing on three of the four approaches to the intersection at SR 42 and Eagles Landing Parkway (NB, SB and EB). Eastbound congestion on Eagles Landing Pkwy appeared to be exacerbated by the construction.

Q

Congestion Type: Mainline Signal Queue
 Location: Peeksville Rd
 Frequency: One time only
 Direction: Southbound
 Queue Population: 35 to 45 vpl
 Number of Lanes: 1
 Note: Congestion appeared to be exacerbated by left-turning vehicles at Peeksville Rd.

SA

Congestion Type: Surveyed Cross Road Signal Queue
 Location: SR 20
 Frequency: Most Observations
 Direction: Northbound
 Queue Population: 20 to 40 vpl
 Number of Lanes: 1

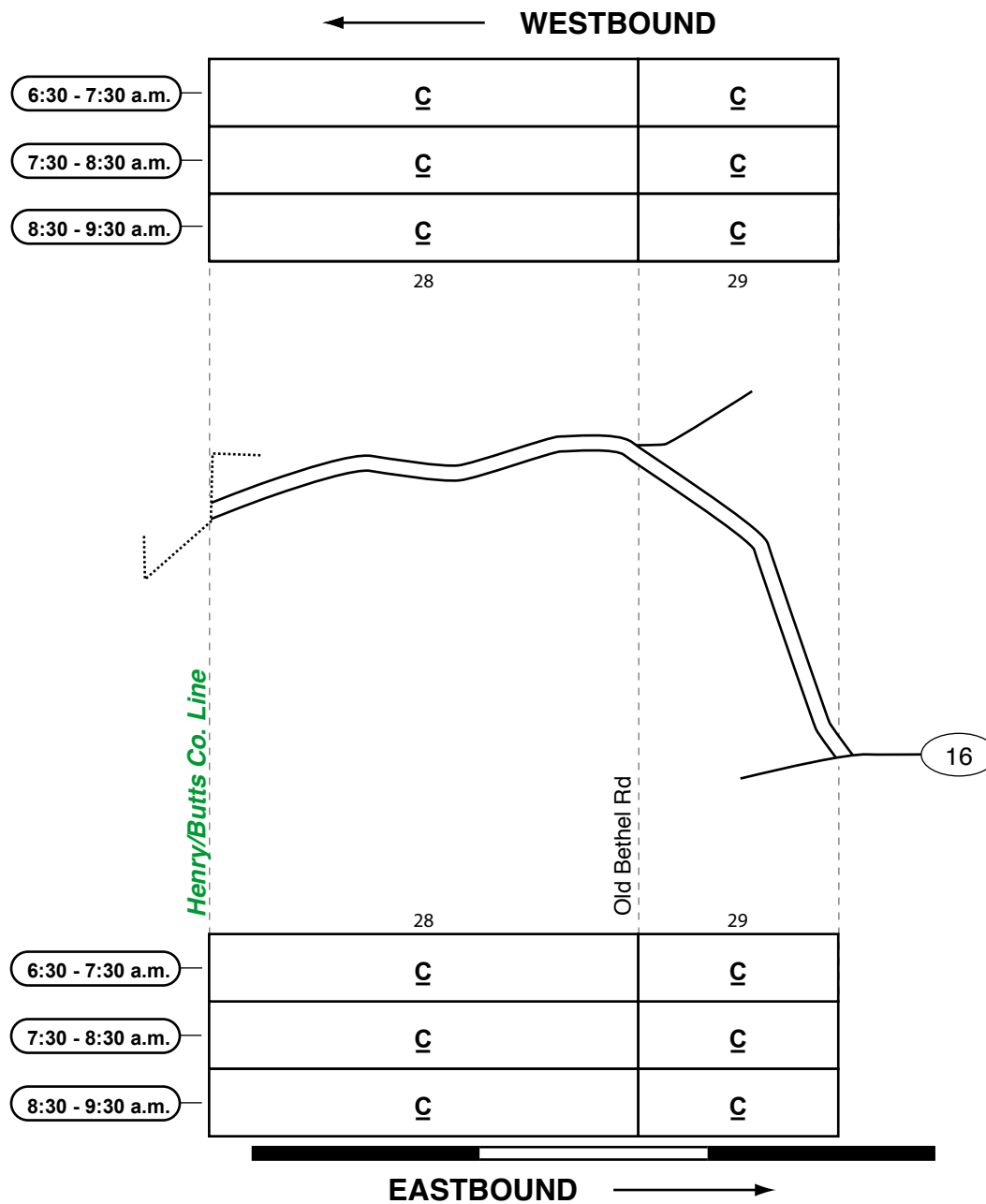
SB

Congestion Type: Surveyed Cross Road Signal Queue
 Location: SR 155
 Frequency: Most Observations
 Direction: Northbound
 Queue Population: 20 to 80 vpl
 Number of Lanes: 1

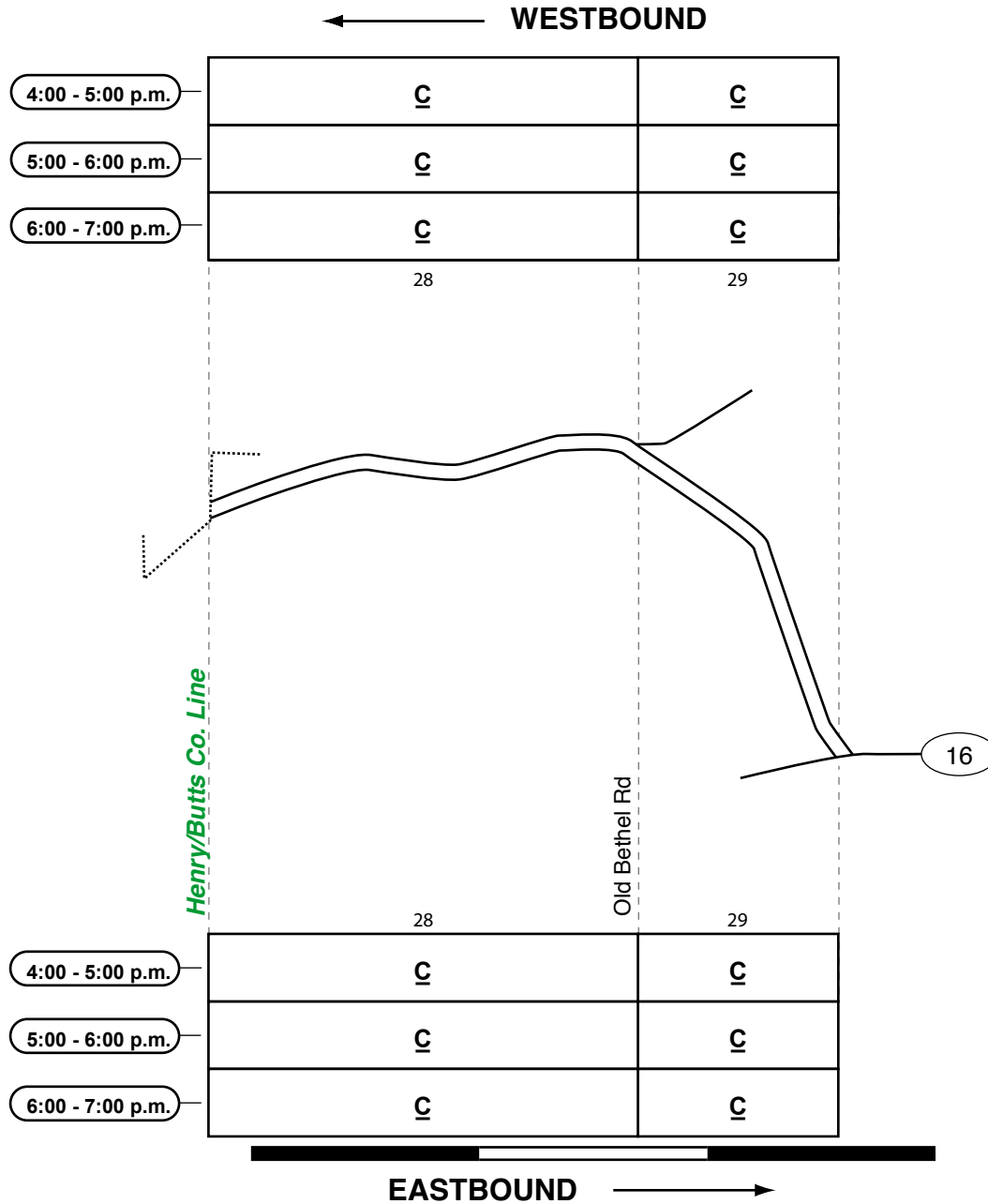
Arterial LOS Legend

| A | B | C | D | E | F |
|------------|-------|----------|-------|-----------|--------|
| Very Light | Light | Moderate | Heavy | Congested | Severe |

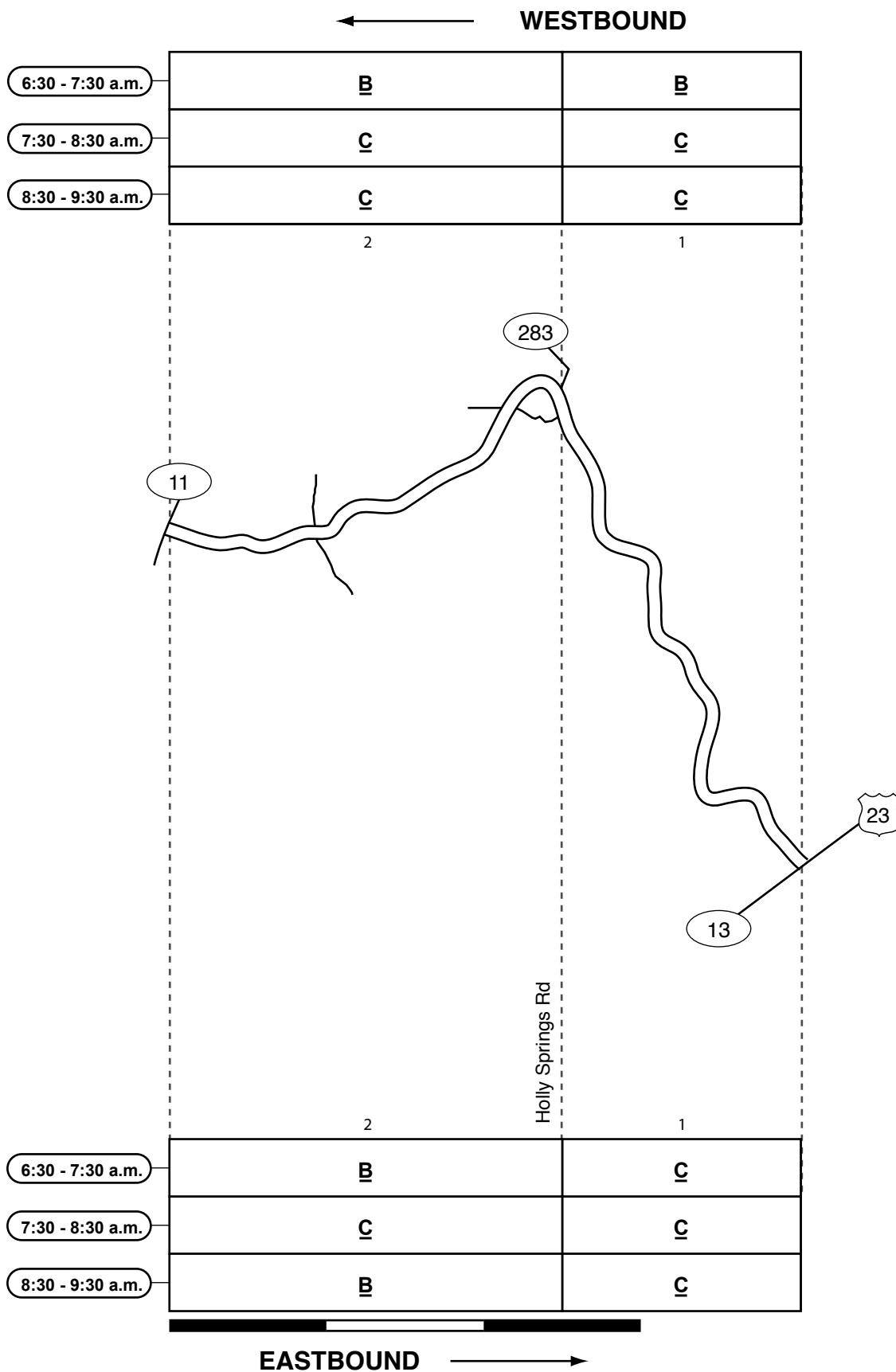
SR 42 (Butts County) - Morning



SR 42 (Butts County) - Evening



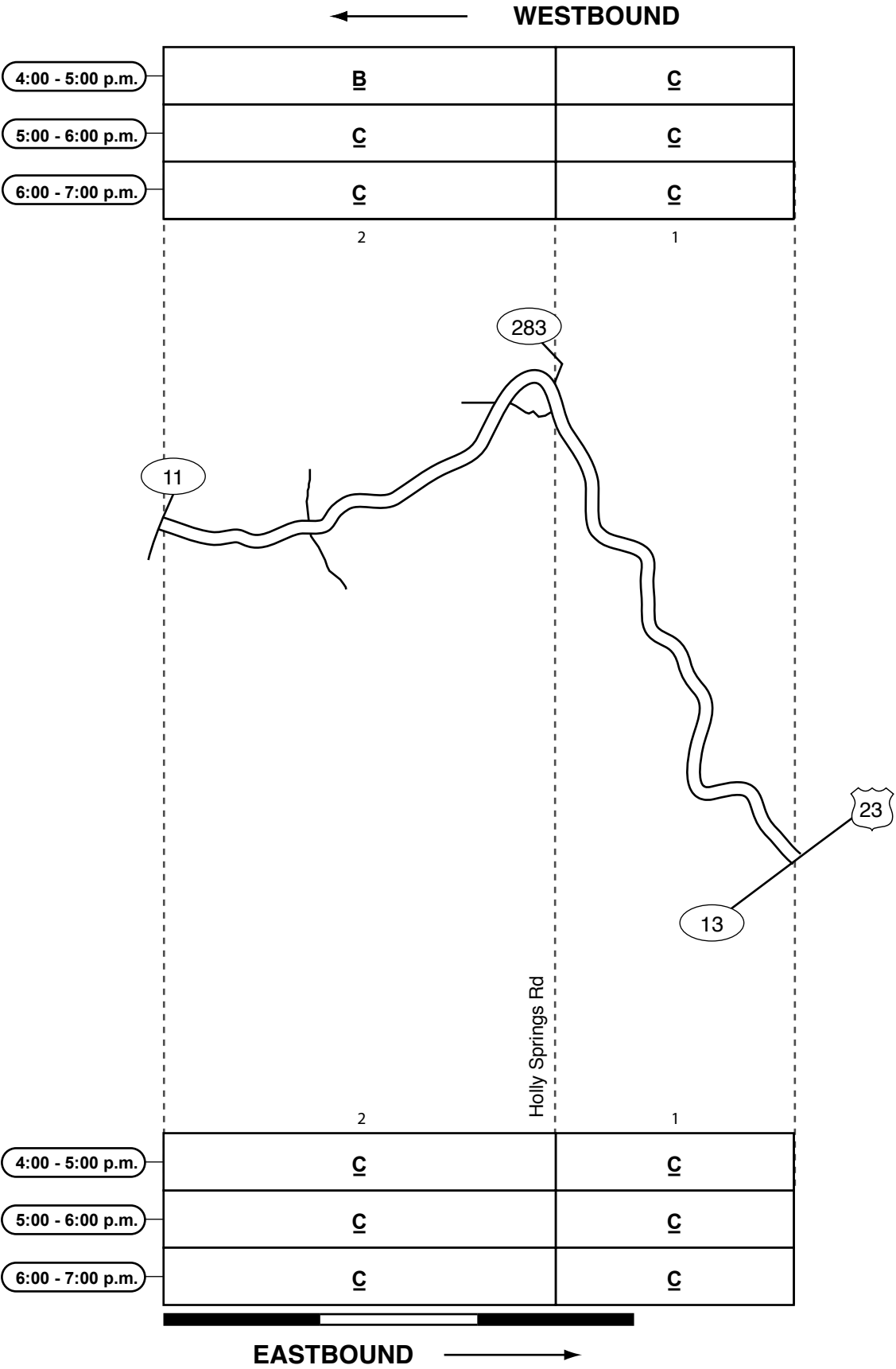
SR 52 (Hall County) - Morning



Arterial LOS Legend

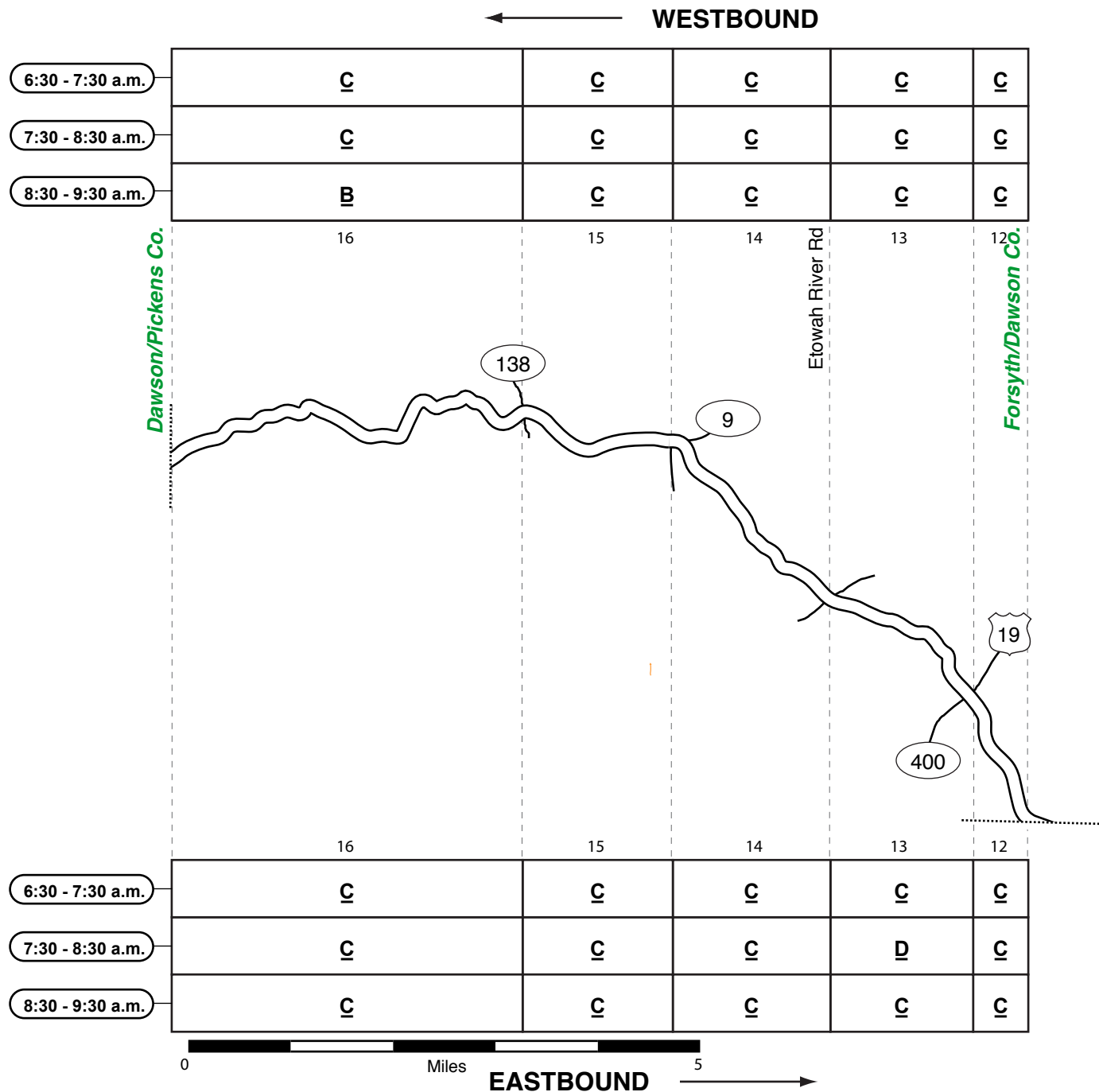
| A | B | C | D | E | F |
|------------|-------|----------|-------|-----------|--------|
| Very Light | Light | Moderate | Heavy | Congested | Severe |

Spring 2010
SR 52 (Hall County) - Evening



Spring 2010

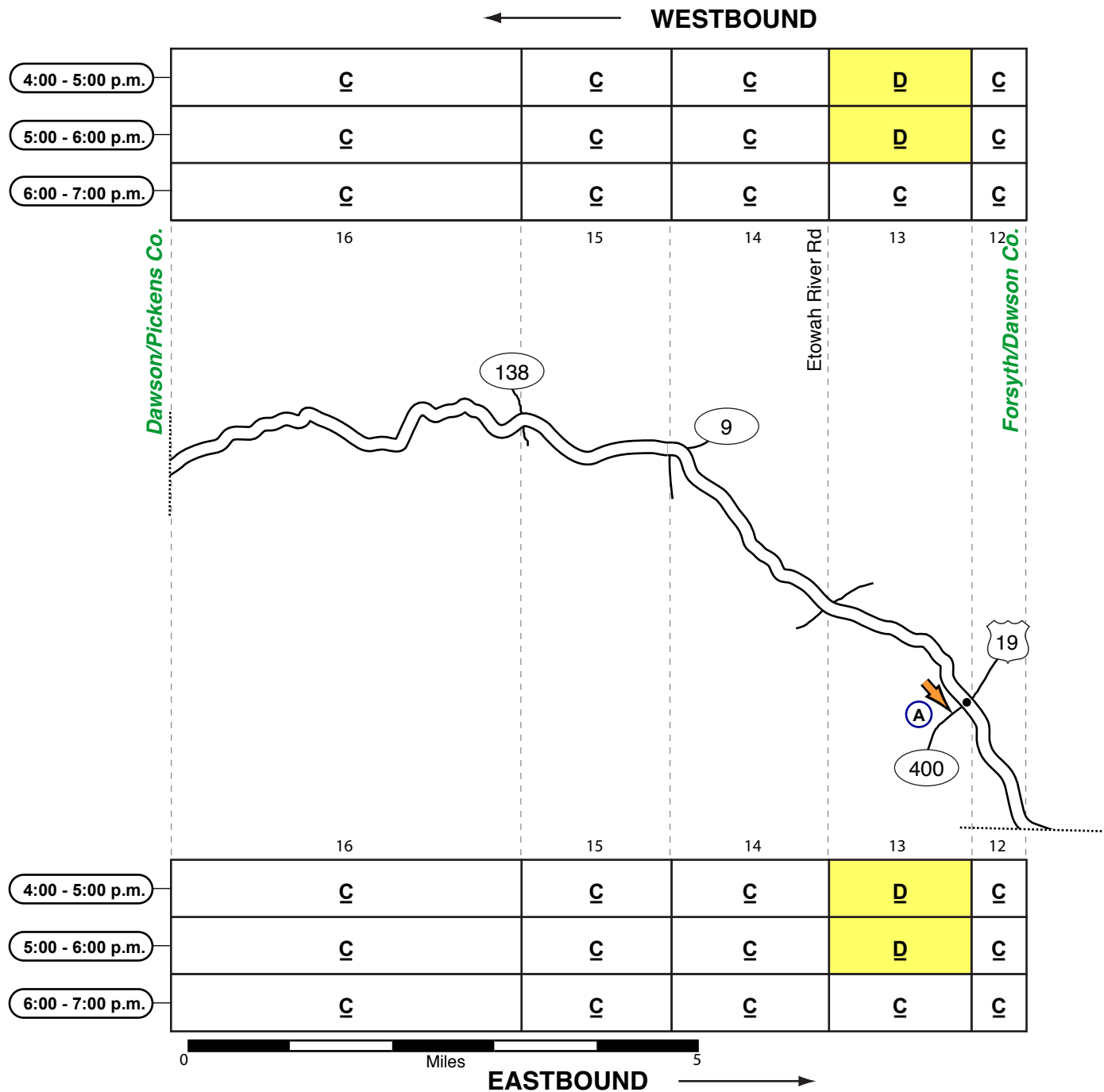
SR 53 (Dawson County) - Morning



Arterial LOS Legend

| A | B | C | D | E | F |
|------------|-------|----------|-------|-----------|--------|
| Very Light | Light | Moderate | Heavy | Congested | Severe |

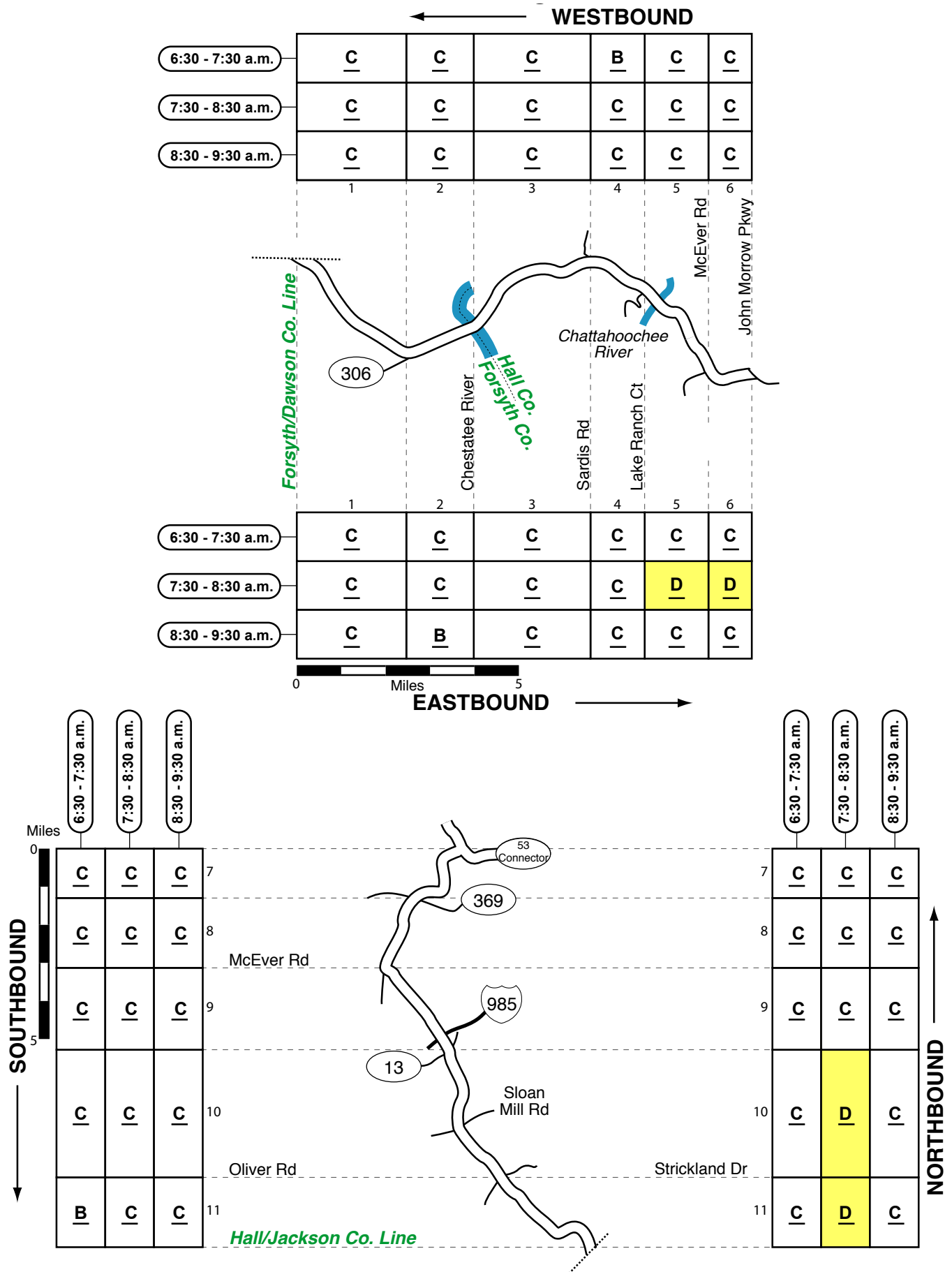
SR 53 (Dawson County) - Evening



A
 Congestion Type: Mainline Signal Queue
 Frequency: Intermittent
 Direction: Eastbound
 Queue Population: 20 to 30 vpl
 Number of Lanes: 1

(Blank)

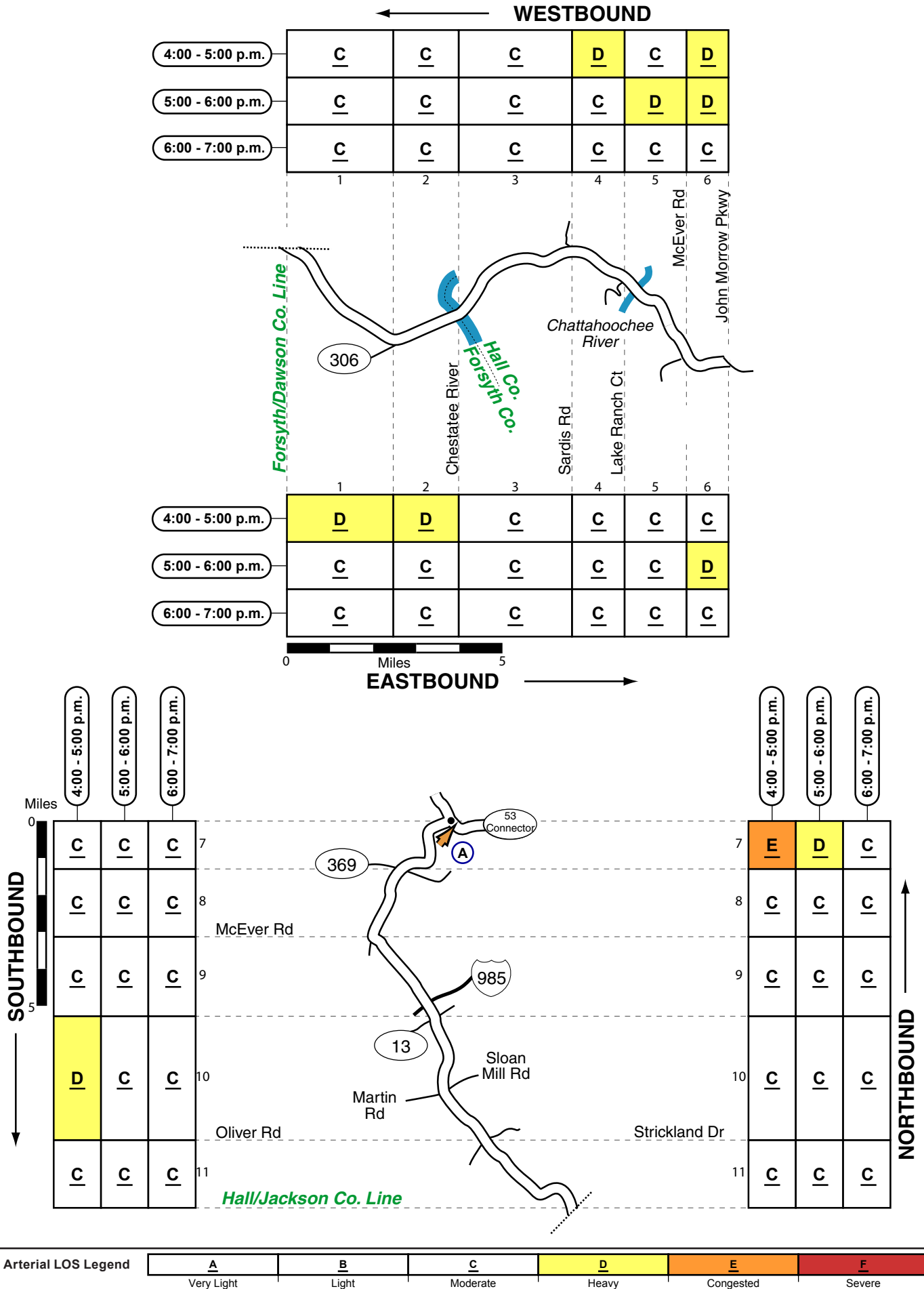
SR 53 (Forsyth & Hall Counties) - Morning



Arterial LOS Legend

| A | B | C | D | E | F |
|------------|-------|----------|-------|-----------|--------|
| Very Light | Light | Moderate | Heavy | Congested | Severe |

SR 53 (Forsyth & Hall Counties) - Evening



SR 53 (Forsyth & Hall Counties) - Evening

A

Congestion Type: Mainline Signal Queue

Location: Dawsonville Highway

Frequency: Intermittent

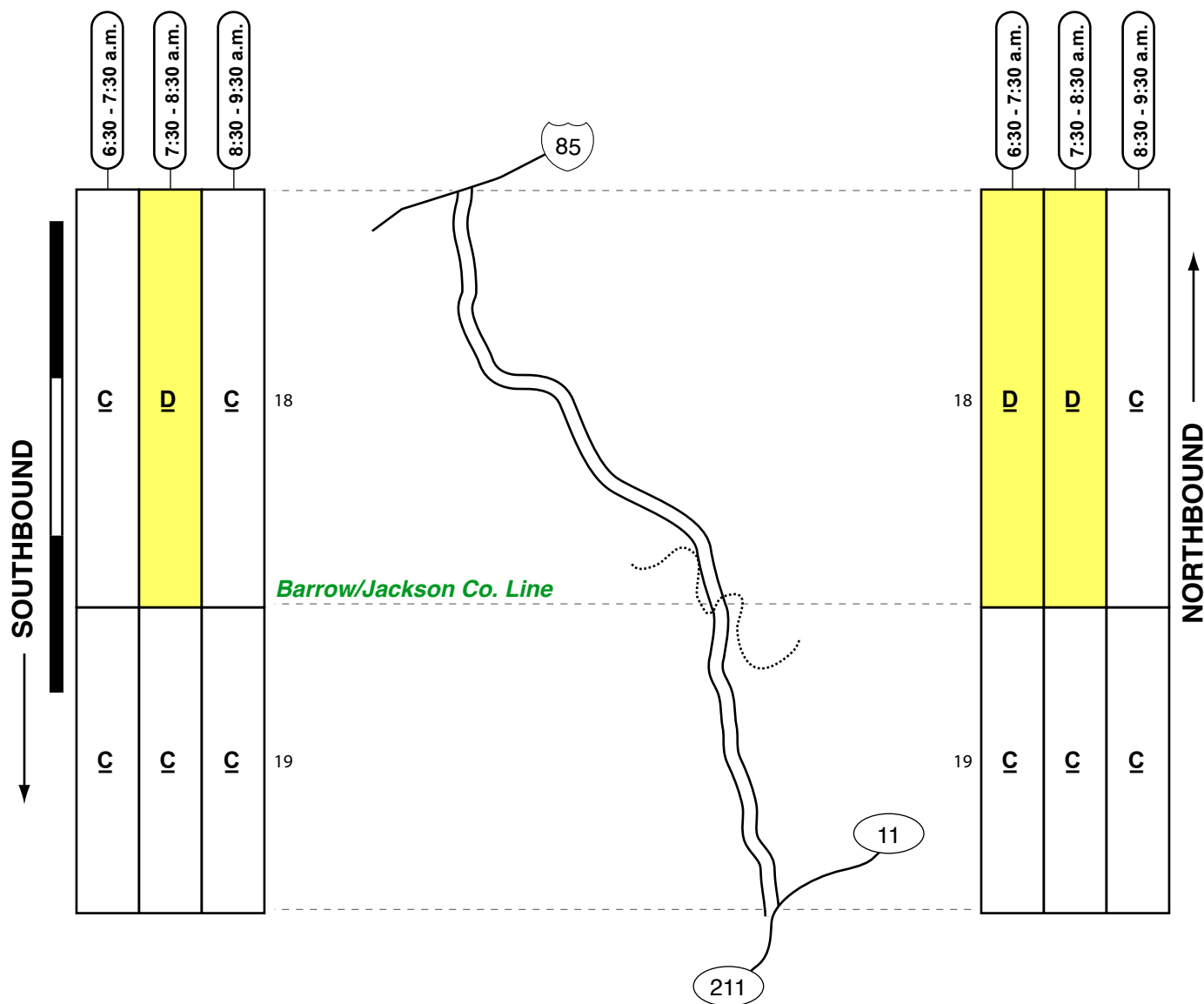
Direction: Northbound

Population: 25 to 50 vpl

Number of Lanes: 2

Note: When congested, the head of the queue was found in the two left-turn lanes at the signal.

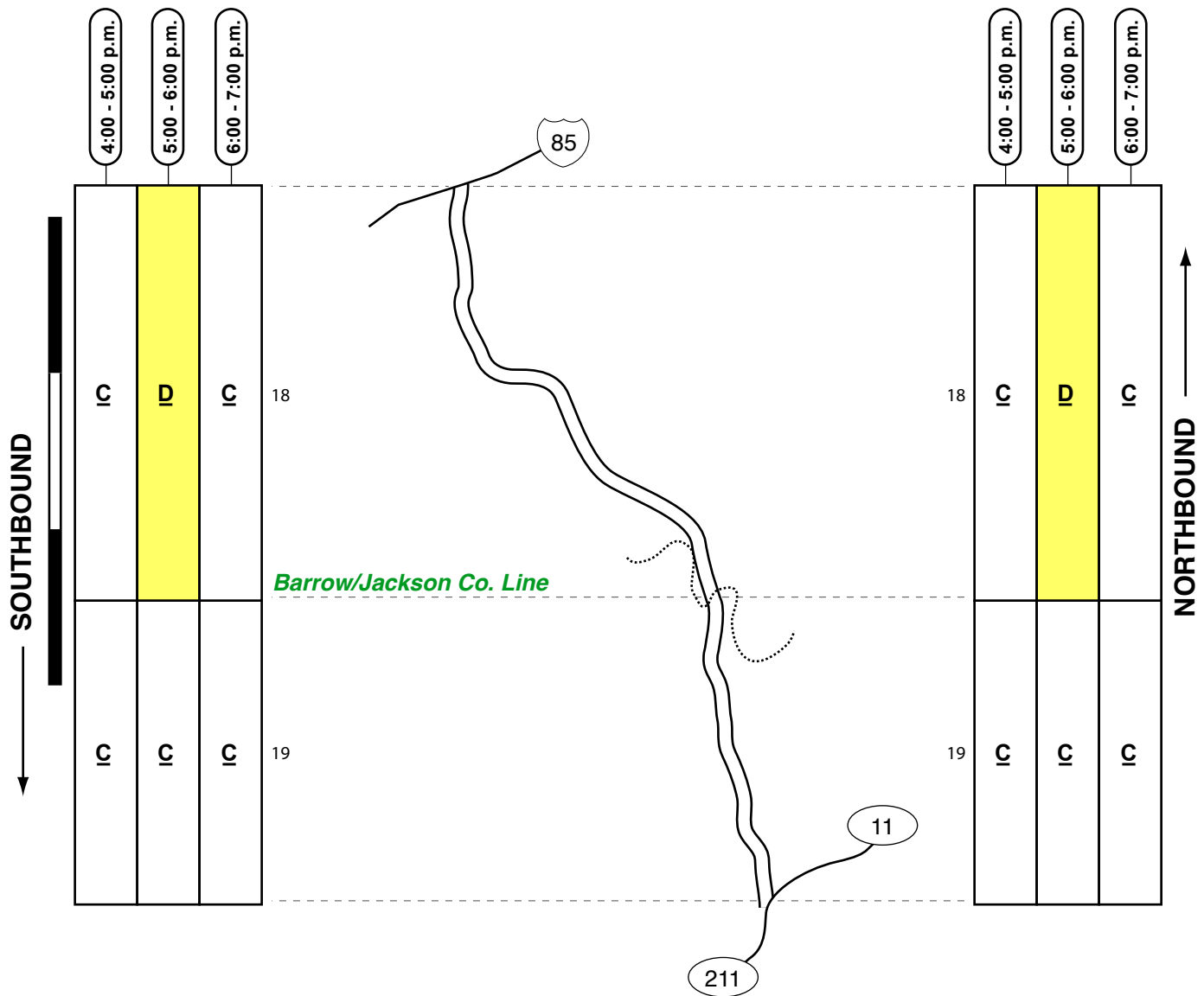
SR 53 (Barrow/Jackson Counties) - Morning



Arterial LOS Legend

| A | B | C | D | E | F |
|------------|-------|----------|-------|-----------|--------|
| Very Light | Light | Moderate | Heavy | Congested | Severe |

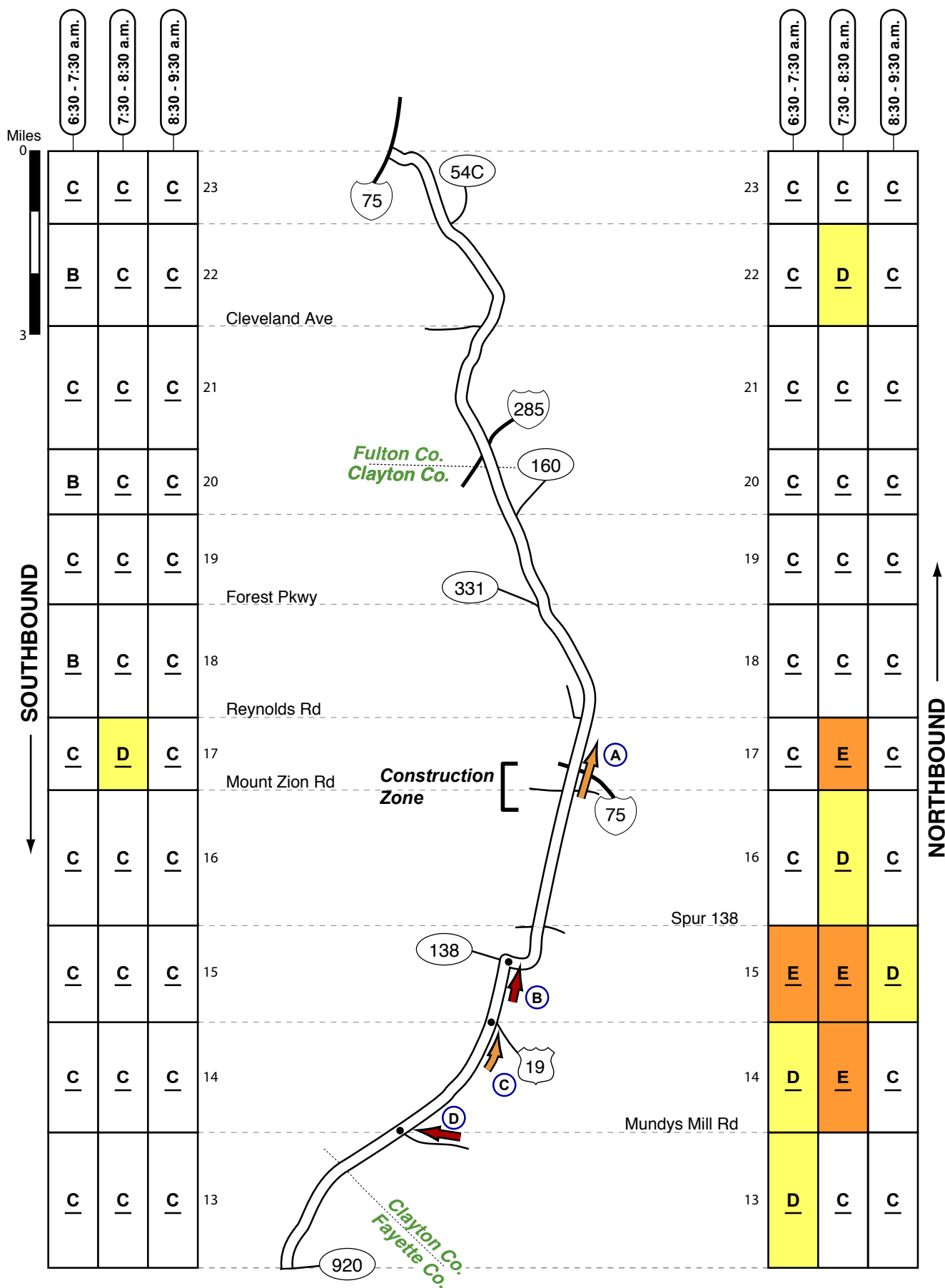
SR 53 (Barrow/Jackson Counties) - Evening



Arterial LOS Legend

| A | B | C | D | E | F |
|------------|-------|----------|-------|-----------|--------|
| Very Light | Light | Moderate | Heavy | Congested | Severe |

SR 54 (Coweta/Fayette/Clayton & Fulton Counties) - Morning



Arterial LOS Legend

A

Very Light

B

Light

C

Moderate

D

Heavy

E

Congested

F

Severe

SR 54 Coweta/Fayette/Clayton & Fulton Counties) - Morning

A

Congestion Type: Platoons

Location: Vicinity of I-75

Frequency: Intermittent

Direction: Northbound

Platoon Population: 25 to 30 vpl

Number of Lanes: 2

Note: Construction at the SR 54 / I-75 Interchange may have caused or exacerbated congestion.

B

Congestion Type: Mainline Signal Queue

Location: SR 138

Frequency: Peak Hour

Direction: Northbound

Queue Population: 20 to 40 vpl

Number of Lanes: 3

C

Congestion Type: Platoons/Mainline Signal Queue

Location: Between Mundys Mill Rd & US 19

Frequency: Intermittent

Direction: Northbound

Queue Population: 20 to 30 vpl

Number of Lanes: 1

Note: Intermittently, large platoons were found approaching US 19; school buses appeared to exacerbate the congestion. In some cases, the signal at US 19 generated queues greater than 20 vehicles per lane.

D

Congestion Type: Cross Road Signal Queue

Location: Mundys Mill Rd

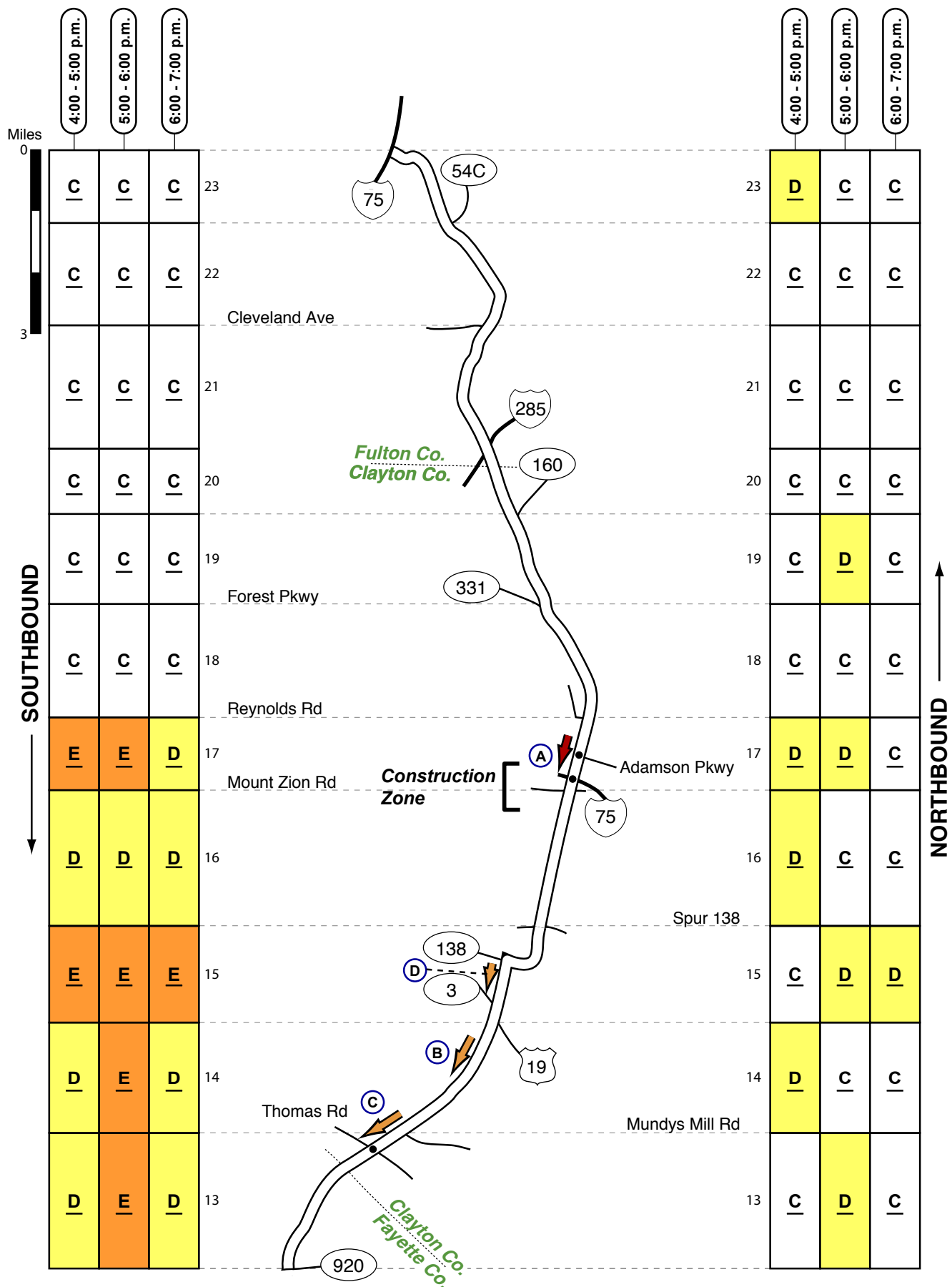
Frequency: Most Observations

Direction: Westbound

Queue Population: 20 to 35 vpl

Number of Lanes: 1

SR 54 (Coweta/Fayette/Clayton & Fulton Counties) - Evening



Arterial LOS Legend

| A | B | C | D | E | F |
|------------|-------|----------|-------|-----------|--------|
| Very Light | Light | Moderate | Heavy | Congested | Severe |

SR 54 Coweta/Fayette/Clayton & Fulton Counties) - Evening

A

Congestion Type: Mainline Signal Queue

Location: I-75/Adamson Parkway

Frequency: Peak Hour

Direction: Southbound

Queue Population: 20 to 30 vpl

Number of Lanes: 2

Note: The SR 54 / I-75 Interchange was under construction during the 2010 aerial survey.

B

Congestion Type: Platoons

Location: Between US 19 & Mundys Mill Rd

Frequency: Intermittent

Direction: Southbound

Platoon Population: 25 to 35 vpl

Number of Lanes: 1

C

Congestion Type: Mainline Signal Queue

Location: Thomas Rd

Frequency: Intermittent

Direction: Westbound

Queue Population: 20 to 25 vpl

Number of Lanes: 1

D

C

Congestion Type: Platoons

Location: Between SR 138 & SR 3

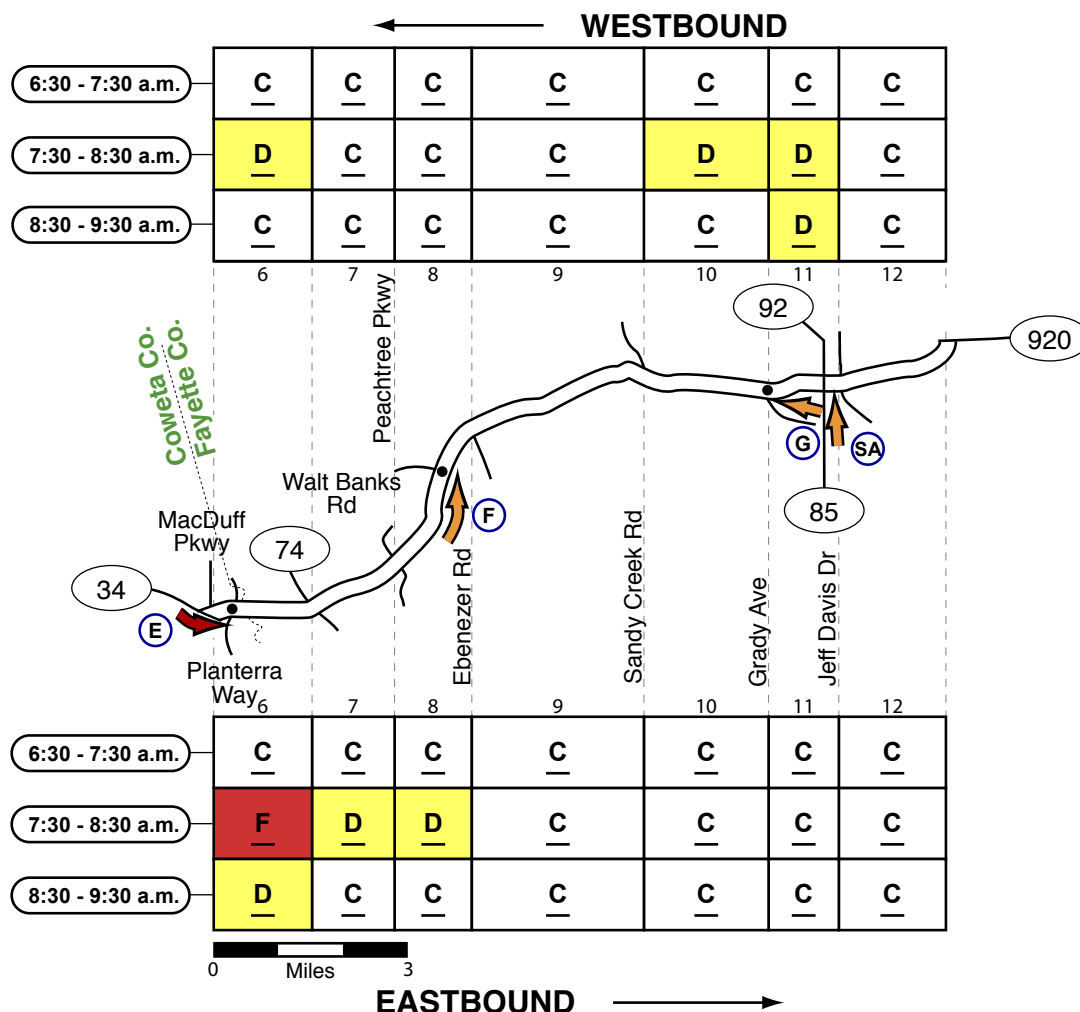
Frequency: Intermittent

Direction: Southbound

Queue Population: 25 to 35 vpl

Number of Lanes: 3

SR 54 (Coweta/Fayette/Clayton & Fulton Counties) - Morning



E

Congestion Type: Mainline Signal Queue
Location: Planterra Way & MacDuff Pkwy

Frequency: Peak Hour

Direction: Eastbound

Queue Population: 20 to 60 vpl

Number of Lanes: 2

Note: During some observations, congestion approaching Planterra Way backed through the upstream signal at MacDuff Pkwy.

F

Congestion Type: Left-Turn Queue

Location: Walt Banks Rd

Frequency: Intermittent

Direction: Eastbound

Queue Population: 20 to 25 vpl

Number of Lanes: 1

G

Congestion Type: Cross Road Signal Queue

Location: Grady Ave

Frequency: Intermittent

Direction: Northbound

Queue Population: 20 to 30 vpl

Number of Lanes: 1

SA

Congestion Type: Surveyed Cross Road Signal Queue

Location: SR 85

Frequency: Intermittent

Direction: Northbound

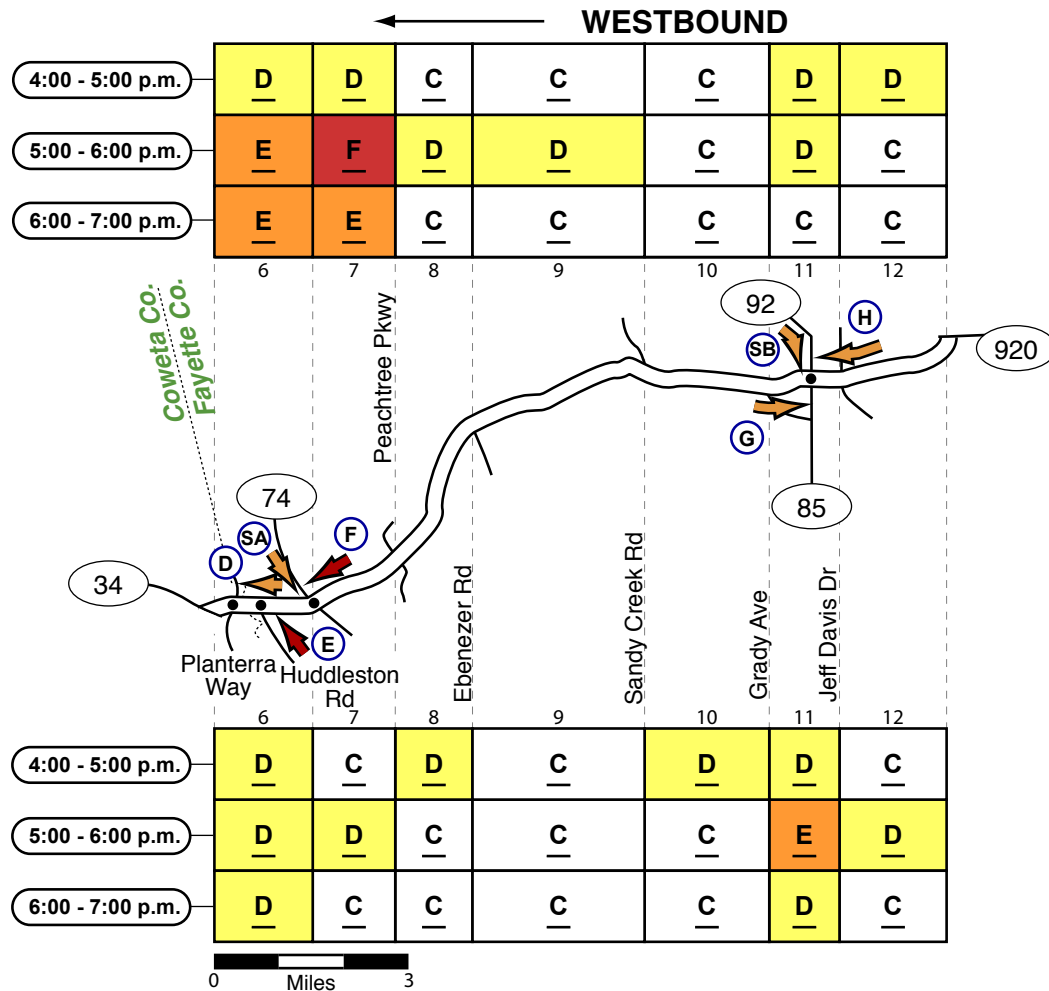
Queue Population: 20 to 25 vpl

Number of Lanes: 2

Arterial LOS Legend

| A | B | C | D | E | F |
|------------|-------|----------|-------|-----------|--------|
| Very Light | Light | Moderate | Heavy | Congested | Severe |

SR 54 Coweta/Fayette/Clayton & Fulton Counties) - Evening



D
 Congestion Type: Mainline Signal Queue
 Location: Huddleston Rd & Planterra Way
 Frequency: Intermittent
 Direction: Westbound
 Queue Population: 20 to 40 vpl
 Number of Lanes: 2

E
 Congestion Type: Cross Road Signal Queue
 Location: Huddleston Rd
 Frequency: Peak Hour
 Direction: Northbound
 Queue Population: 20 to 40 vpl
 Number of Lanes: 1

F
 Congestion Type: Mainline Signal Queue
 Location: SR 74
 Frequency: Peak Hour
 Direction: Westbound
 Queue Population: 20 to 60 vpl
 Number of Lanes: 2
 Note: During one observation, approximately 100 vehicles per lane were queued at the signal.

G
 Congestion Type: Mainline Signal Queue
 Location: SR 85/92
 Frequency: Intermittent
 Direction: Eastbound
 Queue Population: 20 to 35 vpl
 Number of Lanes: 3

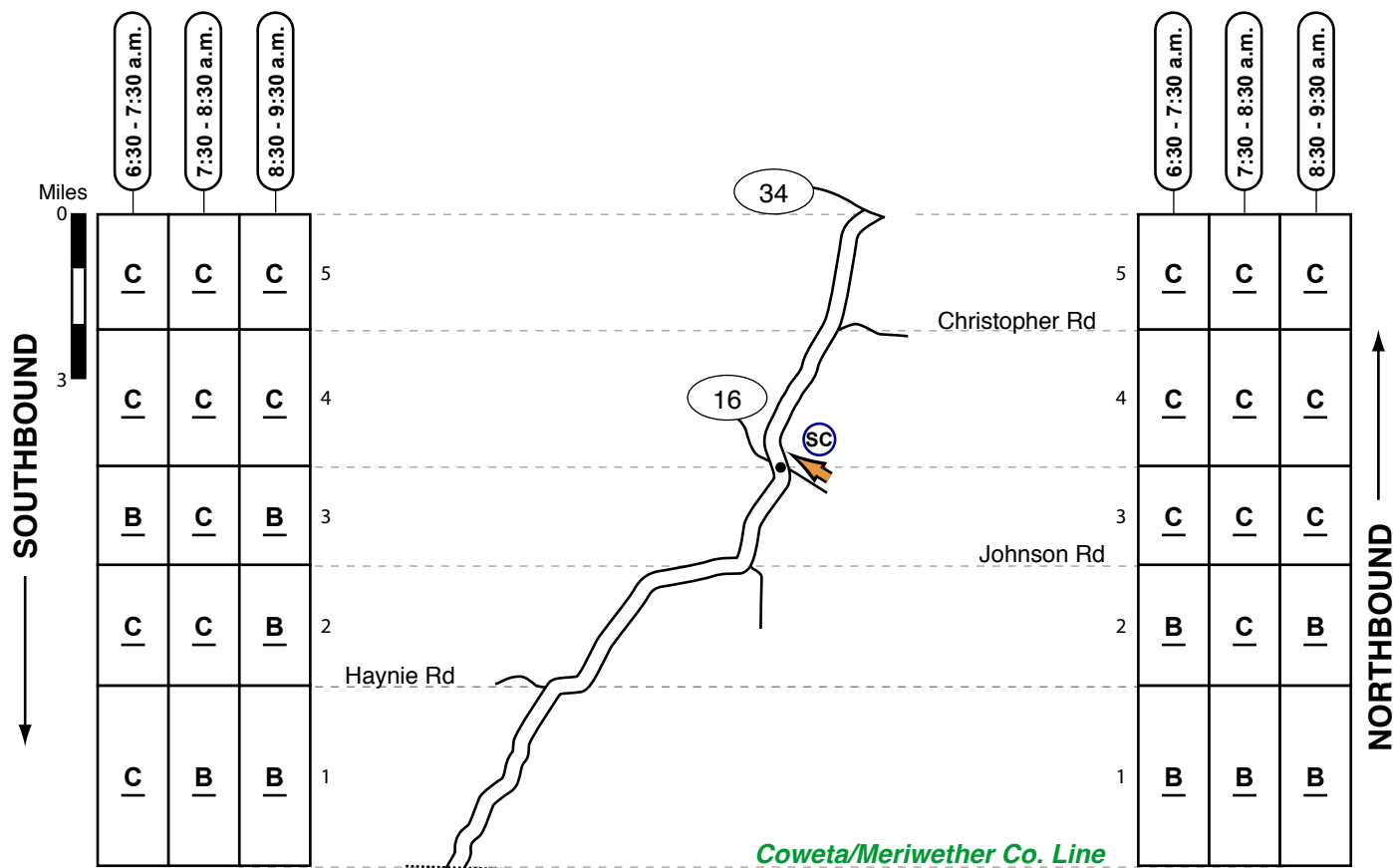
H
 Congestion Type: Mainline Signal Queue
 Location: SR 85/92
 Frequency: Intermittent
 Direction: Westbound
 Queue Population: 20 to 30 vpl
 Number of Lanes: 2

SA
 Congestion Type: Surveyed Cross Road Signal Queue
 Location: SR 74
 Frequency: Intermittent
 Direction: Southbound
 Queue Population: 20 to 30 vpl
 Number of Lanes: 3
 Note: During some observations, congestion was limited to the dedicated right turn lane approaching SR 54.

SB
 Congestion Type: Surveyed Cross Road Signal Queue
 Location: SR 92
 Frequency: Intermittent
 Direction: Southbound
 Queue Population: 20 to 25 vpl
 Number of Lanes: 2

Arterial LOS Legend

| A | B | C | D | E | F |
|------------|-------|----------|-------|-----------|--------|
| Very Light | Light | Moderate | Heavy | Congested | Severe |

SR 54 (Coweta/Fayette/Clayton & Fulton Counties) - Morning

SC

Congestion Type: Surveyed Cross Road Signal Queue

Location: SR 16

Frequency: Intermittent

Direction: Westbound

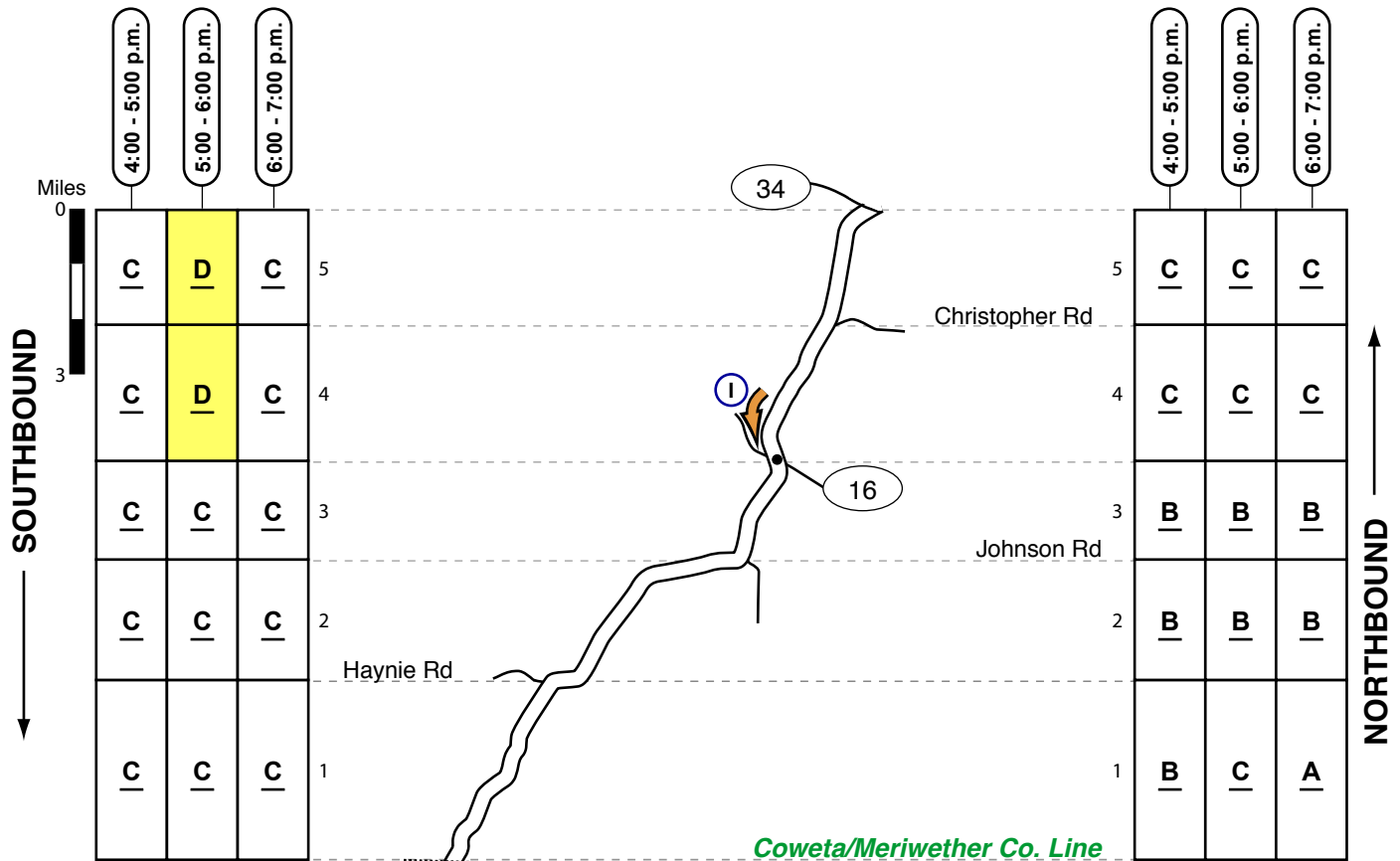
Queue Population: 20 to 40 vpl

Number of Lanes: 1

Arterial LOS Legend

| A | B | C | D | E | F |
|------------|-------|----------|-------|-----------|--------|
| Very Light | Light | Moderate | Heavy | Congested | Severe |

SR 54 (Coweta/Fayette/Clayton & Fulton Counties) - Evening

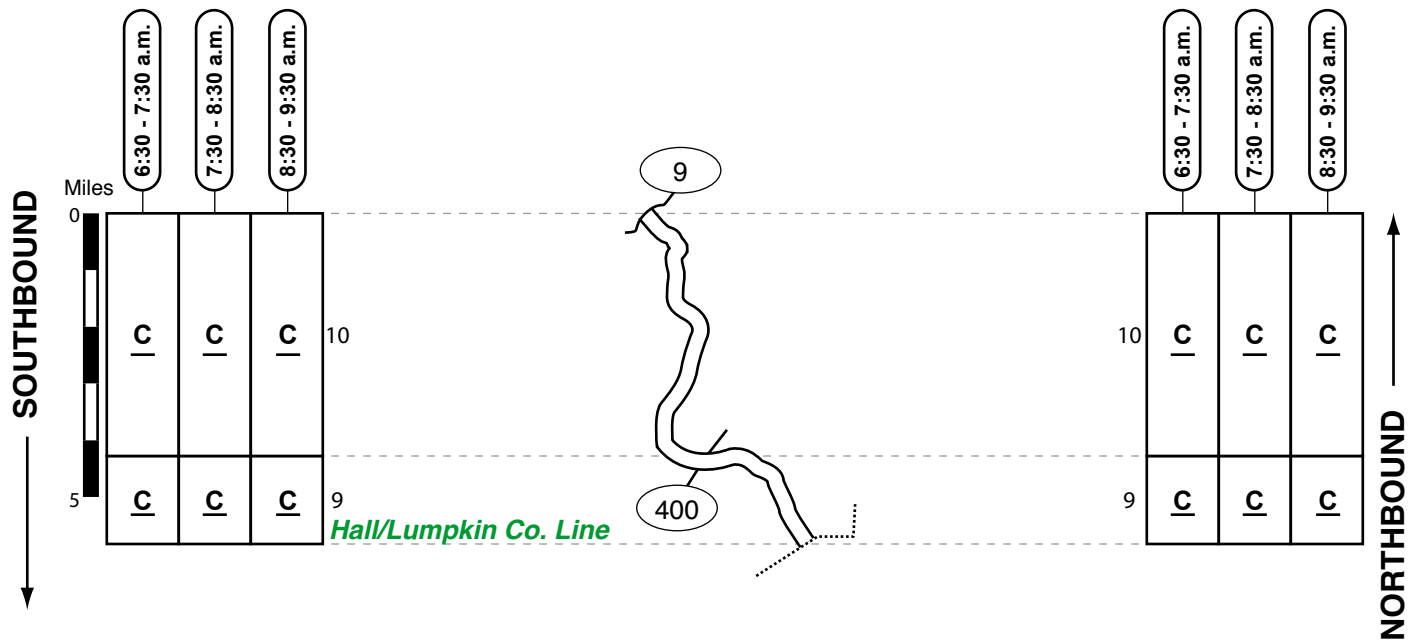


I
 Congestion Type: Mainline Signal Queue
 Location: SR 16
 Frequency: One time only
 Direction: Southbound
 Queue Population: 20 to 40 vpl
 Number of Lanes: 1

Arterial LOS Legend

| A | B | C | D | E | F |
|------------|-------|----------|-------|-----------|--------|
| Very Light | Light | Moderate | Heavy | Congested | Severe |

SR 60 (Lumpkin County) - Morning

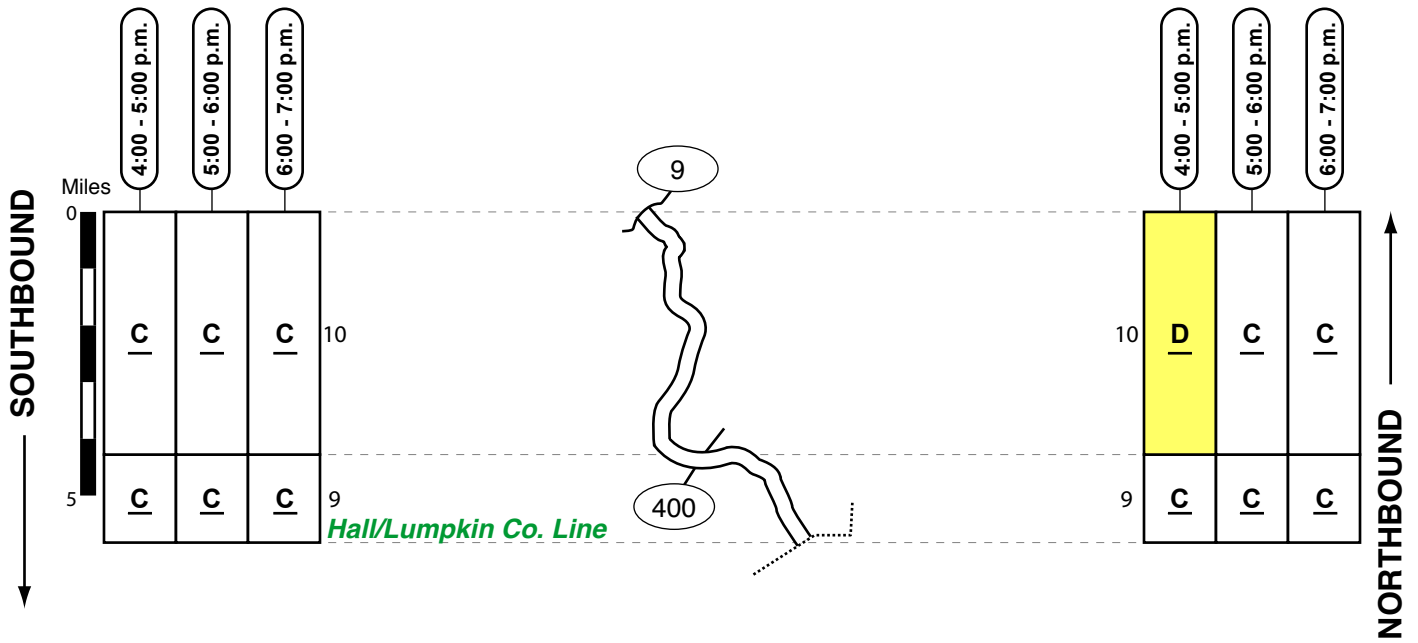


Arterial LOS Legend

| A | B | C | D | E | F |
|------------|-------|----------|-------|-----------|--------|
| Very Light | Light | Moderate | Heavy | Congested | Severe |

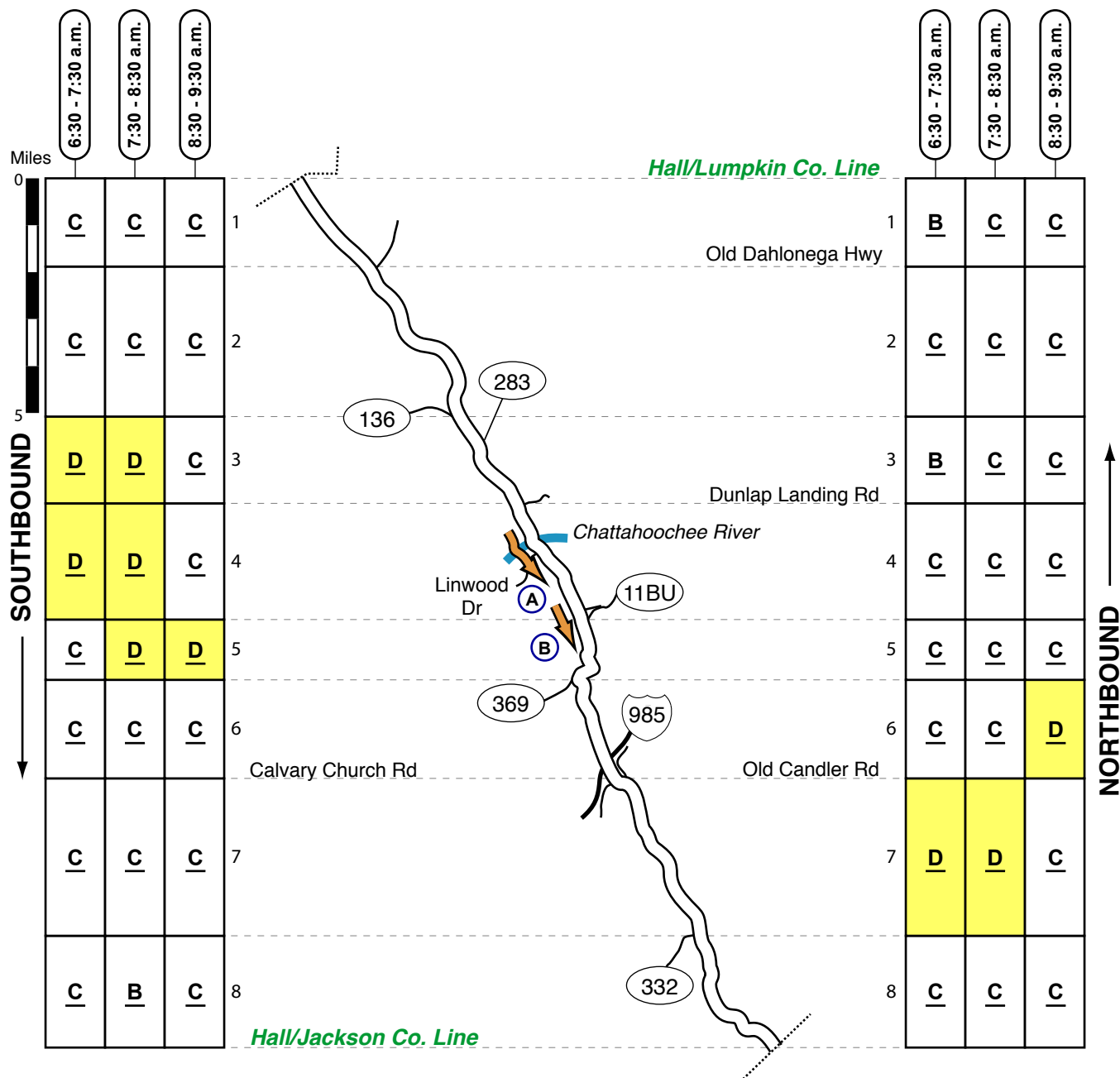
Spring/Fall 2010

SR 60 (Lumpkin County) - Evening



Arterial LOS Legend

| | | | | | |
|------------|----------|----------|----------|-----------|----------|
| A | B | C | D | E | F |
| Very Light | Light | Moderate | Heavy | Congested | Severe |

Spring/Fall 2010
SR 60 (Hall County) - Morning

Spring/Fall 2010
SR 60 (Hall County) - Morning

A

Congestion Type: Platoons

Location: Between Dunlap Landing Rd & SR 11 Business

Frequency: Intermittent

Direction: Southbound

Platoon Population: 35 to 45 vpl

Number of Lanes: 2

B

Congestion Type: Platoons

Location: Between SR 11 Business & SR 369

Frequency: Intermittent

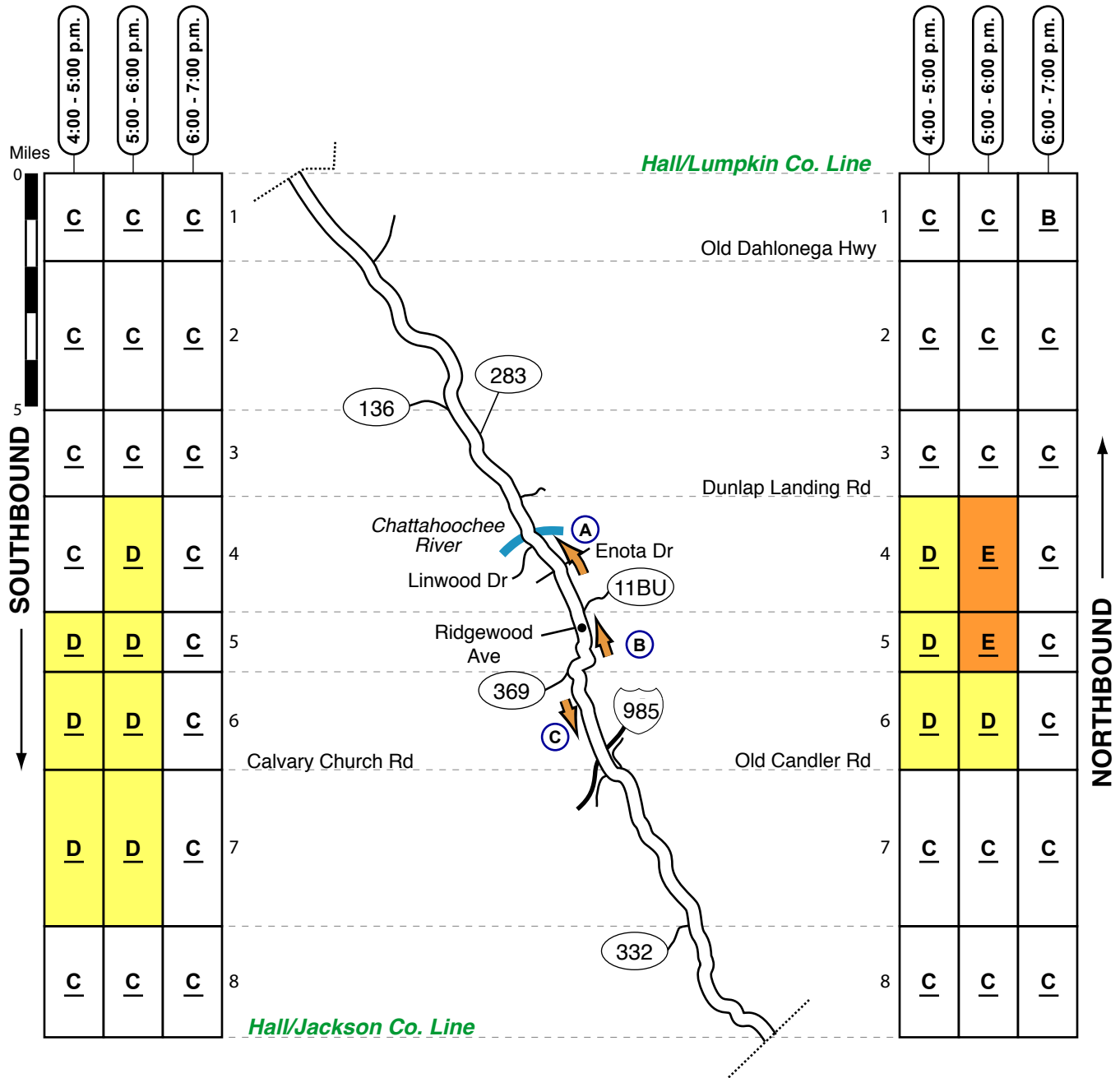
Direction: Southbound

Platoon Population: 25 to 35 vpl

Number of Lanes: 2

Spring/Fall 2010

SR 60 (Hall County) - Evening



Spring/Fall 2010

SR 60 (Hall County) - Evening

A

Congestion Type: Platoons

Location: Between SR 11 Business & Dunlap Landing Rd

Frequency: Intermittent

Direction: Northbound

Platoon Population: 25 to 35 vpl

Number of Lanes: 2

B

Congestion Type: Mainline Signal Queue

Location: Ridgewood Ave

Frequency: Intermittent

Direction: Northbound

Queue Population: 20 to 30 vpl

Number of Lanes: 2

C

Congestion Type: Platoons

Location: Between SR 369 and I-985

Frequency: Intermittent

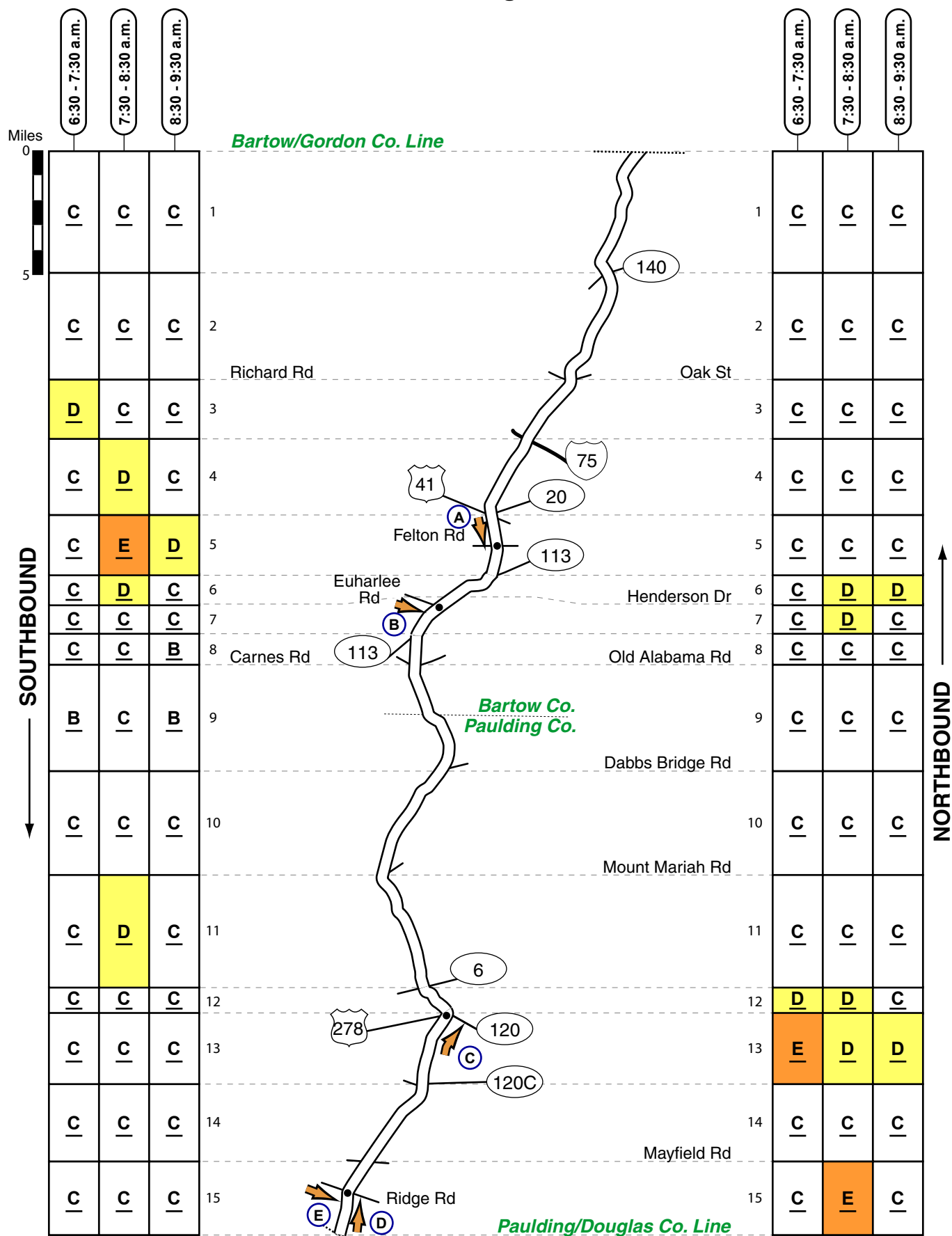
Direction: Southbound

Platoon Population: 25 to 35 vpl

Number of Lanes: 2

Spring 2010

SR 61 (Bartow & Paulding Counties) - Morning



Arterial LOS Legend

SR 61 (Bartow & Paulding Counties) - Morning

A

Congestion Type: Mainline Signal Queue
 Location: Felton Rd
 Frequency: Intermittent
 Direction: Southbound
 Queue Population: 20 to 25 vpl
 Number of Lanes: 1

B

Congestion Type: Cross Road Signal Queue
 Location: Euharlee Rd
 Direction: Eastbound
 Frequency: Intermittent
 Queue Population: 20 to 35 vpl
 Number of Lanes: 1

C

Congestion Type: Mainline Signal Queue
 Location: SR 120
 Frequency: Intermittent
 Direction: Northbound
 Queue Population: 20 to 35 vpl
 Number of Lanes: 1

D

Congestion Type: Mainline Signal Queue
 Location: Ridge Rd
 Frequency: Intermittent
 Direction: Northbound
 Queue Population: 20 to 25 vpl
 Number of Lanes: 1

E

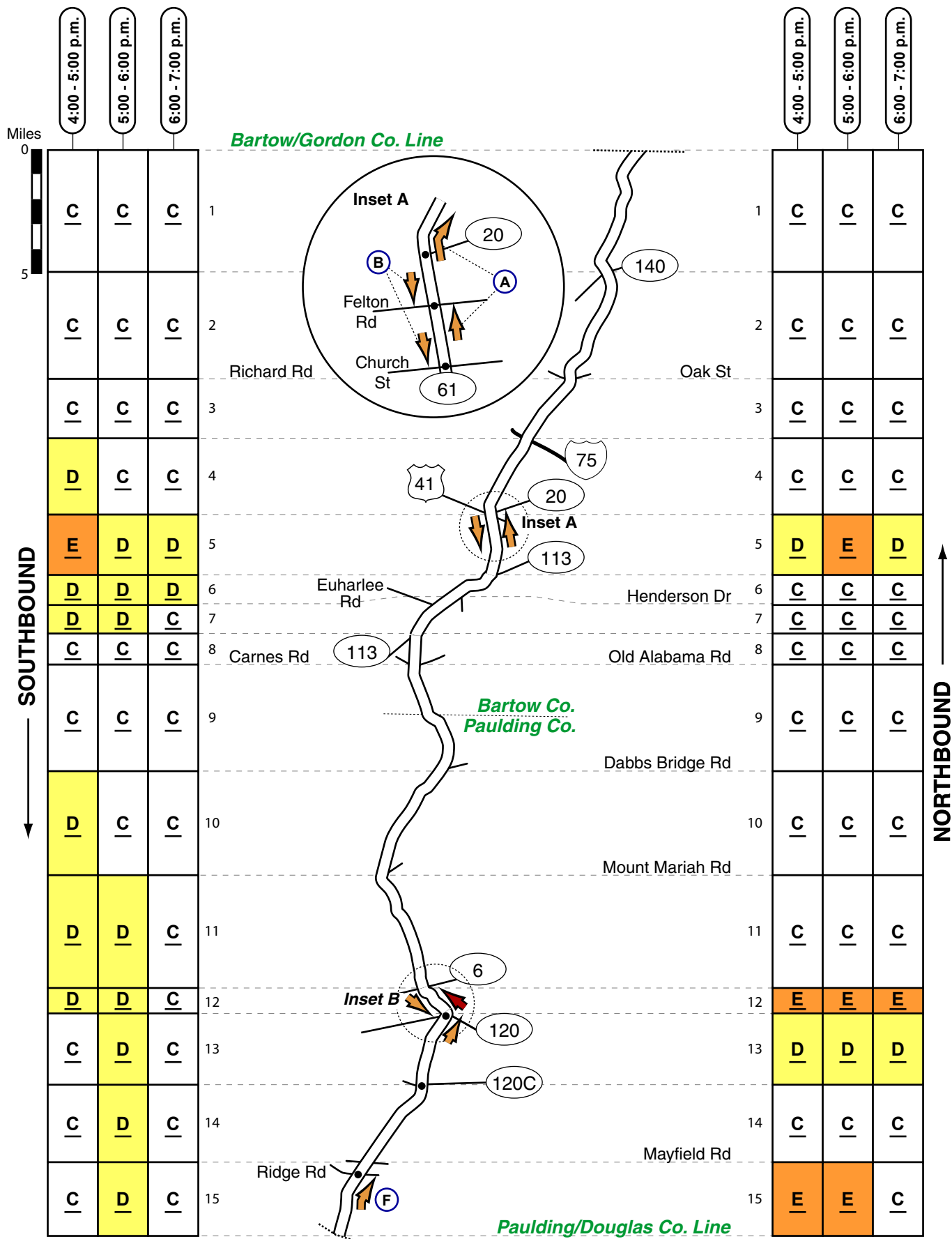
Congestion Type: Cross Road Signal Queue
 Location: Ridge Rd
 Frequency: Intermittent
 Direction: Eastbound
 Queue Population: 20 to 30 vpl
 Number of Lanes: 1

Arterial LOS Legend

| <u>A</u> | <u>B</u> | <u>C</u> | <u>D</u> | <u>E</u> | <u>F</u> |
|------------|----------|----------|----------|-----------|----------|
| Very Light | Light | Moderate | Heavy | Congested | Severe |

Spring 2010

SR 61 (Bartow & Paulding Counties) - Evening



SR 61 (Bartow & Paulding Counties) - Evening

A

Congestion Type: Mainline Signal Queue/Platoons
 Location: SR 20 & Felton Rd
 Frequency: Intermittent
 Direction: Northbound
 Queue Population: 20 to 30 vpl
 Number of Lanes: 1

B

Congestion Type: Mainline Signal Queues
 Location: Felton Rd / Church St
 Frequency: Intermittent
 Direction: Southbound
 Queue Population: 20 to 25 vpl
 Number of Lanes: 1
 Note: While no one signal consistently generated congestion, intermittent delays were found traveling southbound between SR 20 and SR 113.

C

Congestion Type: Mainline Signal Queue
 Location: Main St
 Frequency: Most Observations
 Direction: Northbound
 Queue Population: 20 to 40 vpl
 Number of Lanes: 1

D

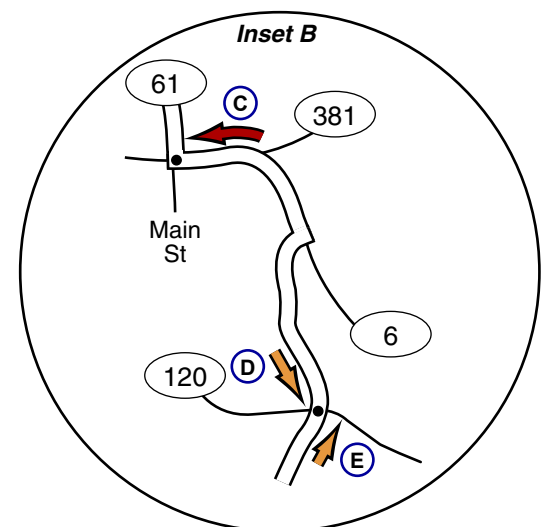
Congestion Type: Mainline Signal Queue
 Location: SR 120
 Frequency: Intermittent
 Direction: Southbound
 Queue Population: 20 to 25 vpl
 Number of Lanes: 1

E

Congestion Type: Mainline Signal Queue
 Location: SR 120
 Frequency: Intermittent
 Direction: Northbound
 Queue Population: 20 to 35 vpl
 Number of Lanes: 1

F

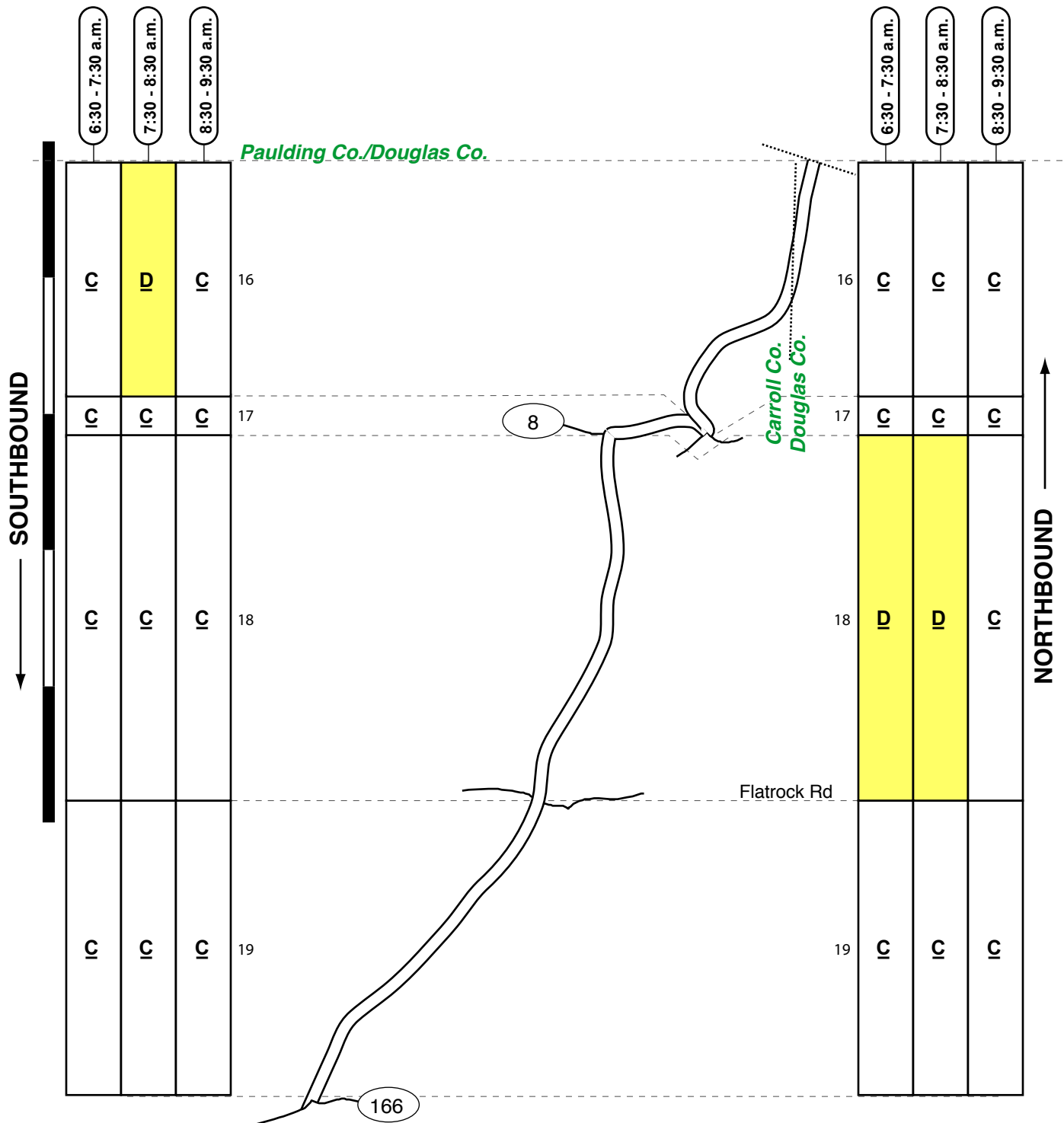
Congestion Type: Mainline Signal Queue
 Location: Ridge Rd
 Frequency: Intermittent
 Direction: Northbound
 Queue Population: 20 to 40 vpl
 Number of Lanes: 1



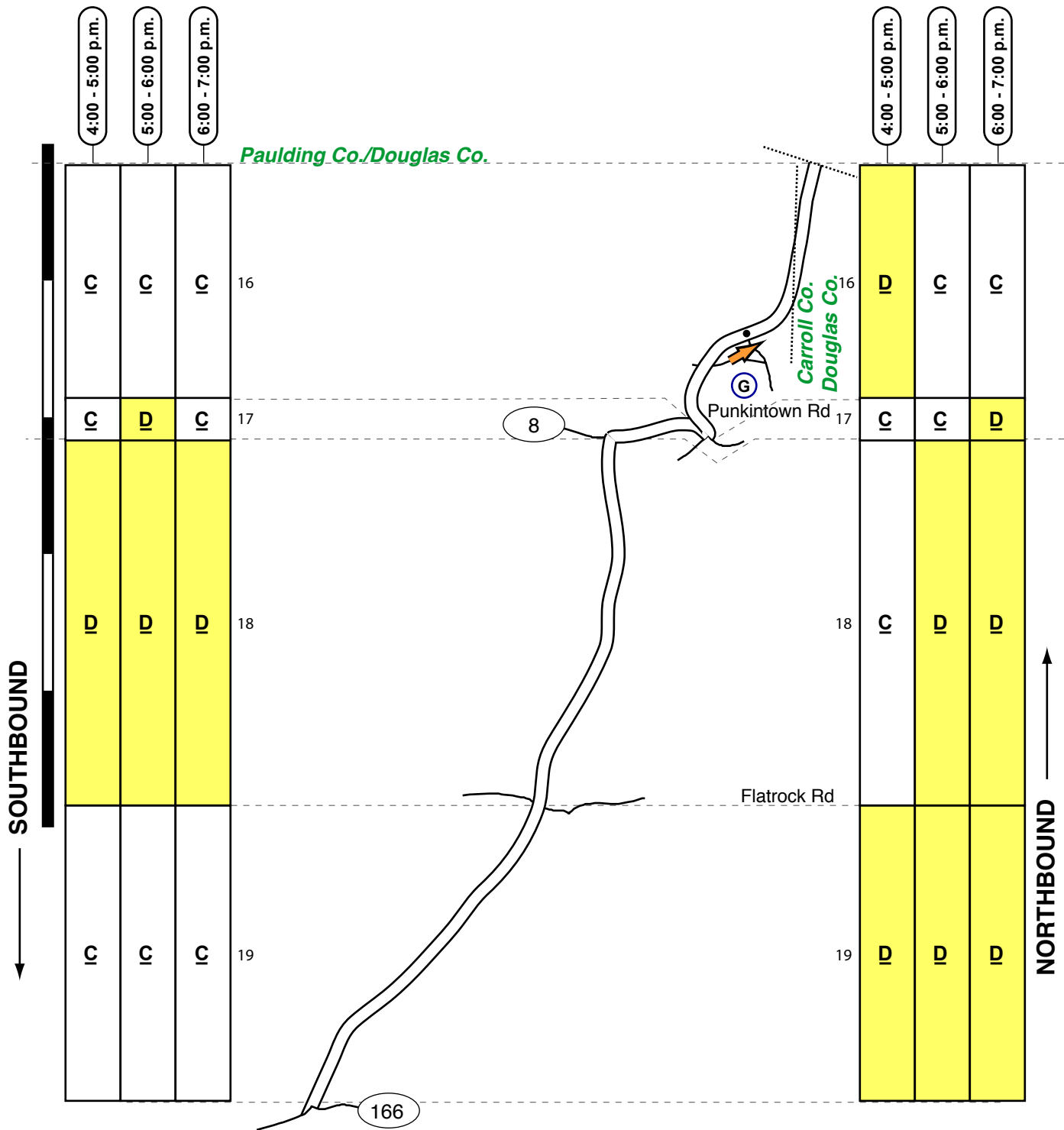
Arterial LOS Legend

| A | B | C | D | E | F |
|------------|-------|----------|-------|-----------|--------|
| Very Light | Light | Moderate | Heavy | Congested | Severe |

SR 61 (Carroll County) - Morning



SR 61 (Carroll County) - Evening



G

Congestion Type: Mainline Signal Queue

Location: Punkintown Rd

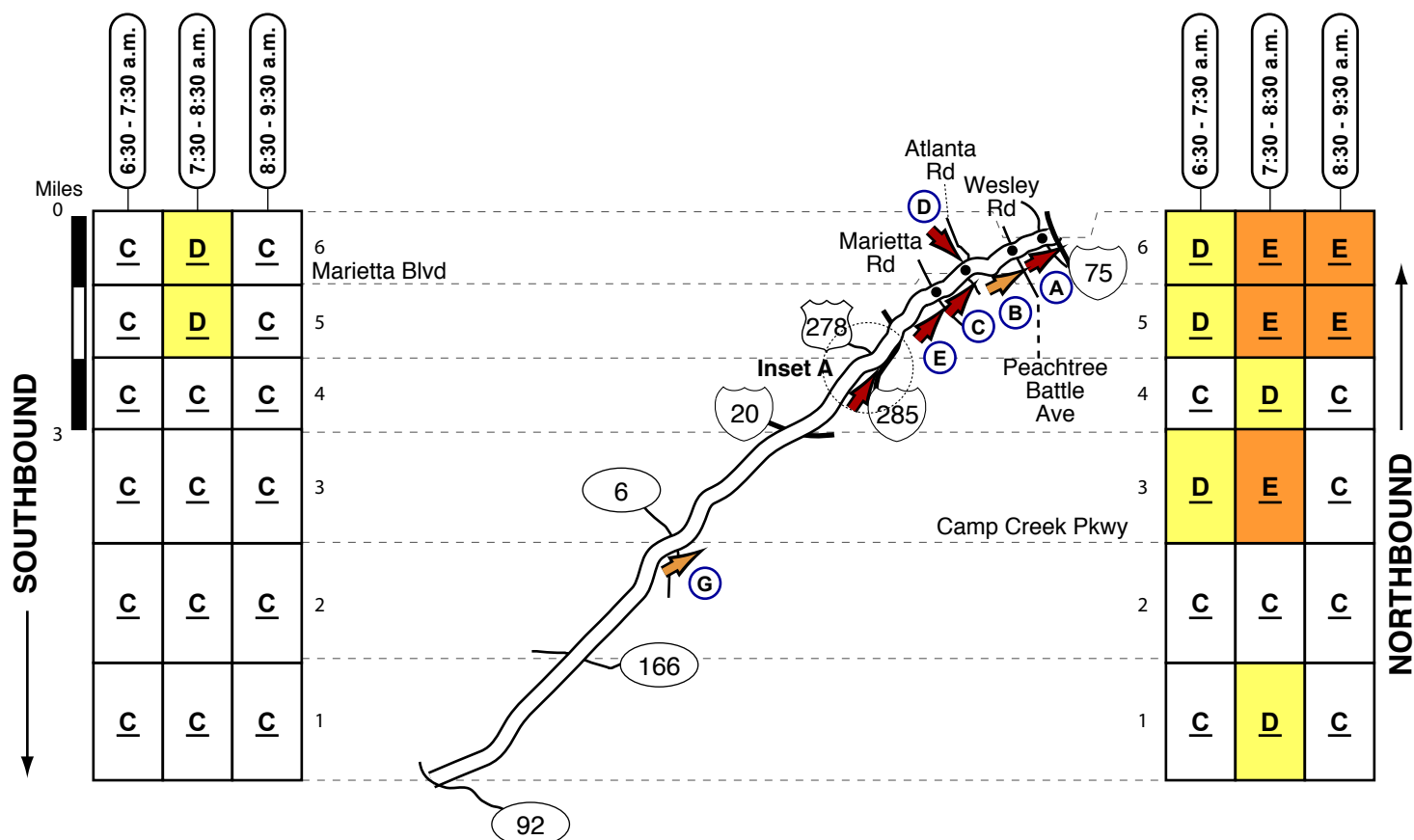
Frequency: Intermittent

Direction: Northbound

Queue Population: 20 to 25 vpl

Number of Lanes: 1

SR 70 (Fulton County) - Morning



A
Congestion Type: Mainline Signal Queue
Location: Wesley Rd
Frequency: Peak Hour
Direction: Northbound
Queue Population: 20 to 40 vpl
Number of Lanes: 1

B
Congestion Type: Mainline Signal Queue
Location: Peachtree Battle Ave
Frequency: Intermittent
Direction: Northbound
Queue Population: 25 to 50 vpl
Number of Lanes: 1

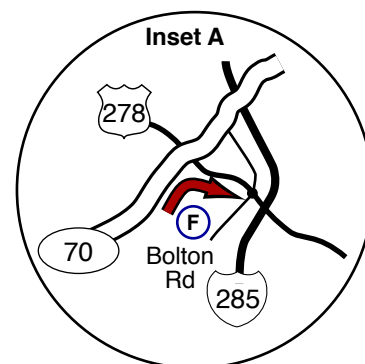
C
Congestion Type: Mainline Signal Queue
Location: Marietta Blvd / Atlanta Rd
Frequency: Most observations after 8:00 a.m.
Direction: Northbound
Queue Population: 25 to 45 vpl
Number of Lanes: 1

D
Congestion Type: Cross Road Signal Queue
Location: Atlanta Rd
Frequency: Most observations after 8:00 a.m.
Direction: Eastbound
Queue Population: 30 to 60 vpl
Number of Lanes: 2

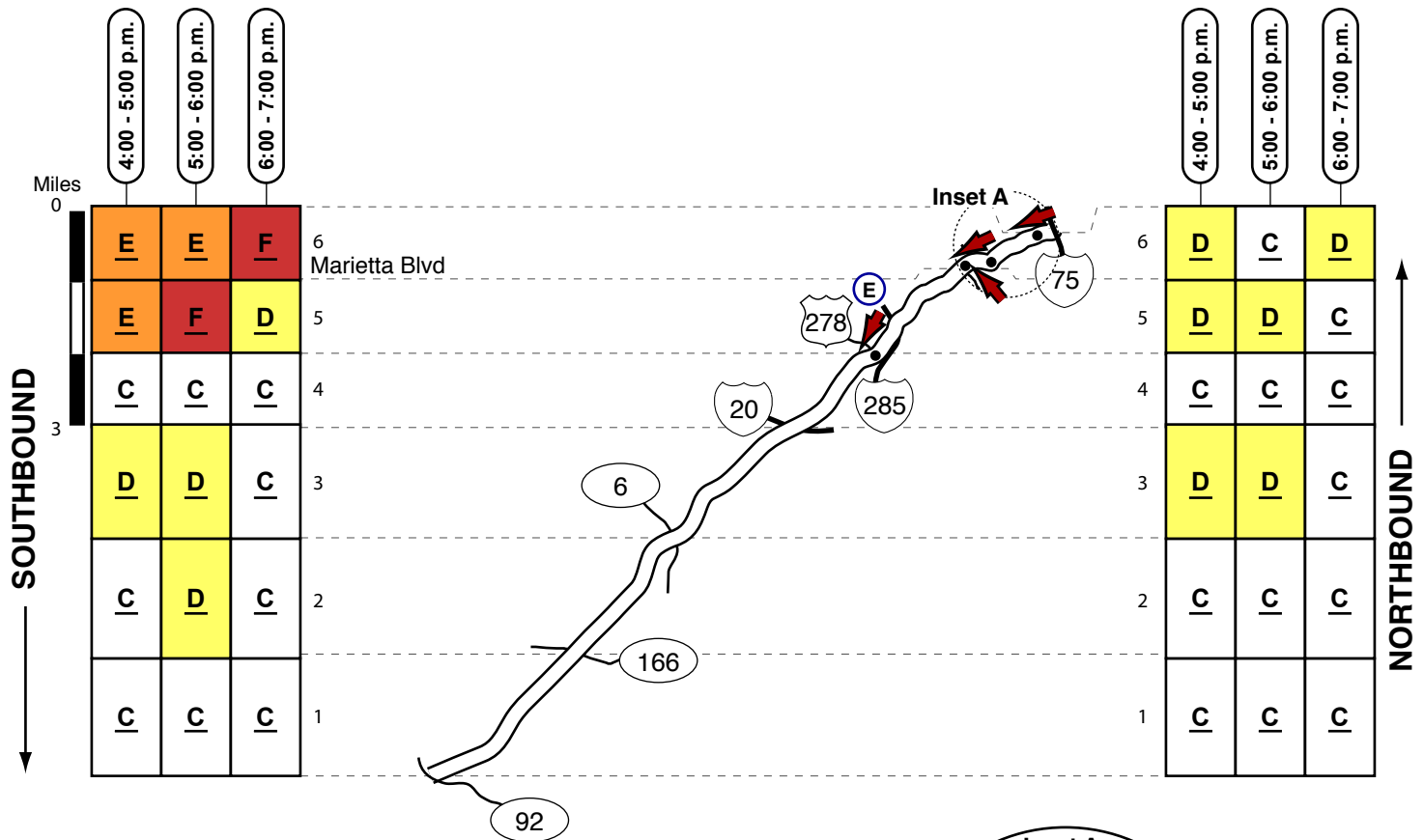
E
Congestion Type: Mainline Signal Queue
Location: Marietta Rd
Frequency: Peak Hour
Direction: Northbound
Queue Population: 30 to 45 vpl
Number of Lanes: 1

F
Congestion Type: Right-Turn Queue
Location: US 278
Frequency: Peak Hour
Direction: Northbound
Queue Population: 20 to 40 vpl
Number of Lanes: 1
Note: Congestion appeared to be exacerbated by downstream congestion on US 278 approaching the signal at Bolton Rd

G
Congestion Type: Platoons
Location: vicinity of Camp Creek Parkway
Frequency: Intermittent
Direction: Northbound
Platoon Population: 25 to 35 vpl
Number of Lanes: 3



SR 70 (Fulton County) - Evening



A
 Congestion Type: Mainline Signal Queue
 Location: Wesley Rd
 Frequency: Most Observations
 Direction: Southbound
 Queue Population: 20 to 40 vpl
 Number of Lanes: 1

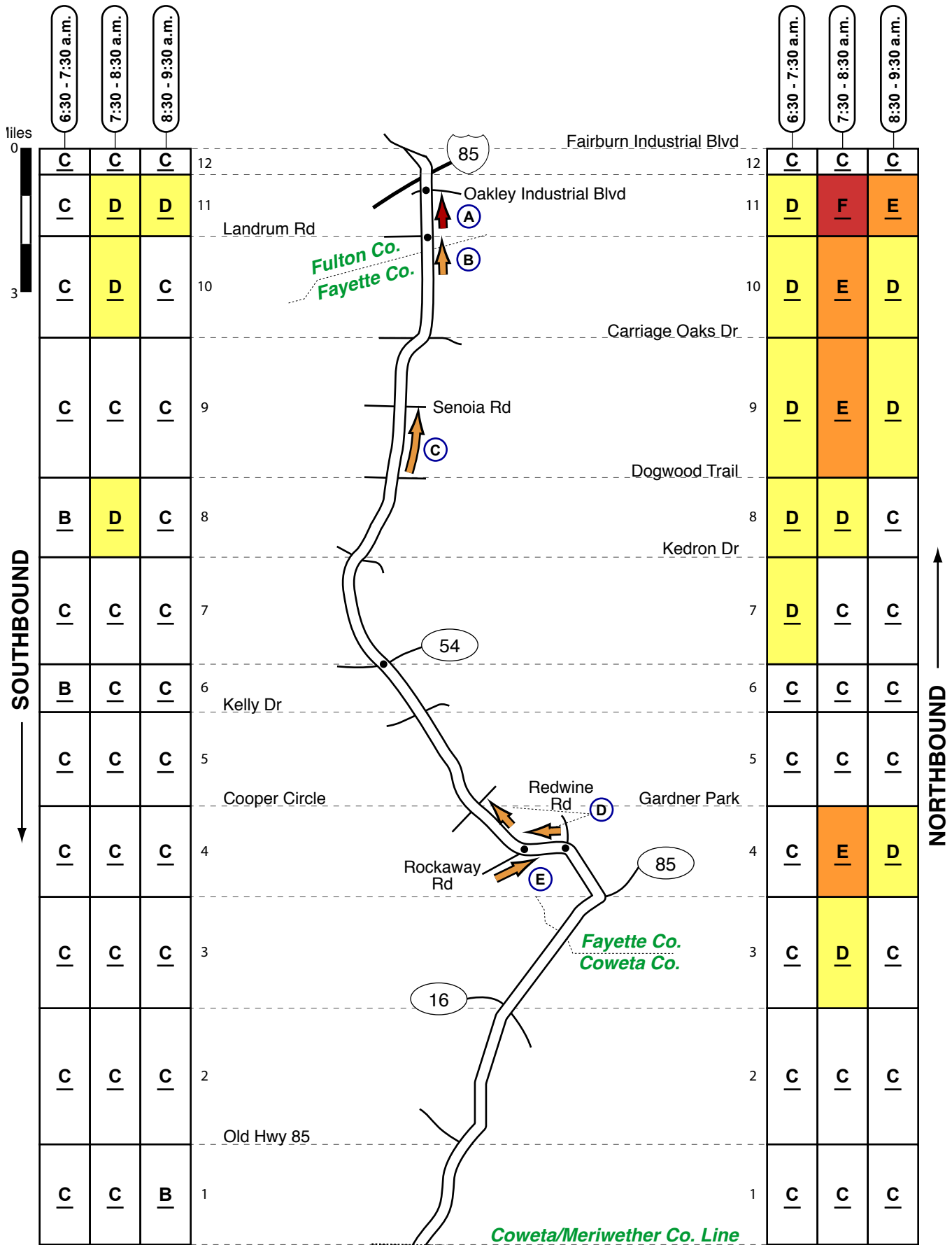
B
 Congestion Type: Mainline Signal Queue
 Location: Defoors Ferry Rd
 Frequency: Intermittent
 Direction: Southbound
 Queue Population: 20 to 30 vpl
 Number of Lanes: 1

C
 Congestion Type: Mainline Signal Queue
 Location: Marietta Blvd / Atlanta Rd
 Frequency: Most Observations
 Direction: Southbound
 Queue Population: 20 to 50 vpl
 Number of Lanes: 1

D
 Congestion Type: Cross Road Signal Queue
 Location: Marietta Blvd
 Frequency: Peak Hour
 Direction: Northbound
 Queue Population: 25 to 35 vpl
 Number of Lanes: 2

E
 Congestion Type: Mainline Signal Queue
 Location: US 278
 Frequency: Peak Hour
 Direction: Southbound
 Queue Population: 20 to 60 vpl
 Number of Lanes: 1

SR 74 (Fulton/Fayette & Coweta Counties) - Morning



SR 74 (Fulton/Fayette & Coweta Counties) - Morning

A

Congestion Type: Mainline Signal Queue
Location: Oakley Industrial Blvd
Frequency: Peak Hour
Direction: Northbound
Queue Population: 20 to 80 vpl
Number of Lanes: 2

B

Congestion Type: Mainline Signal Queue
Location: Landrum Rd
Frequency: Intermittent
Direction: Northbound
Queue Population: 20 to 40 vpl
Number of Lanes: 2

C

Congestion Type: Platoons
Location: Between Dogwood Trail and Senoia Rd
Frequency: Intermittent
Direction: Northbound
Platoon Population: 25 to 35 vpl
Number of Lanes: 2

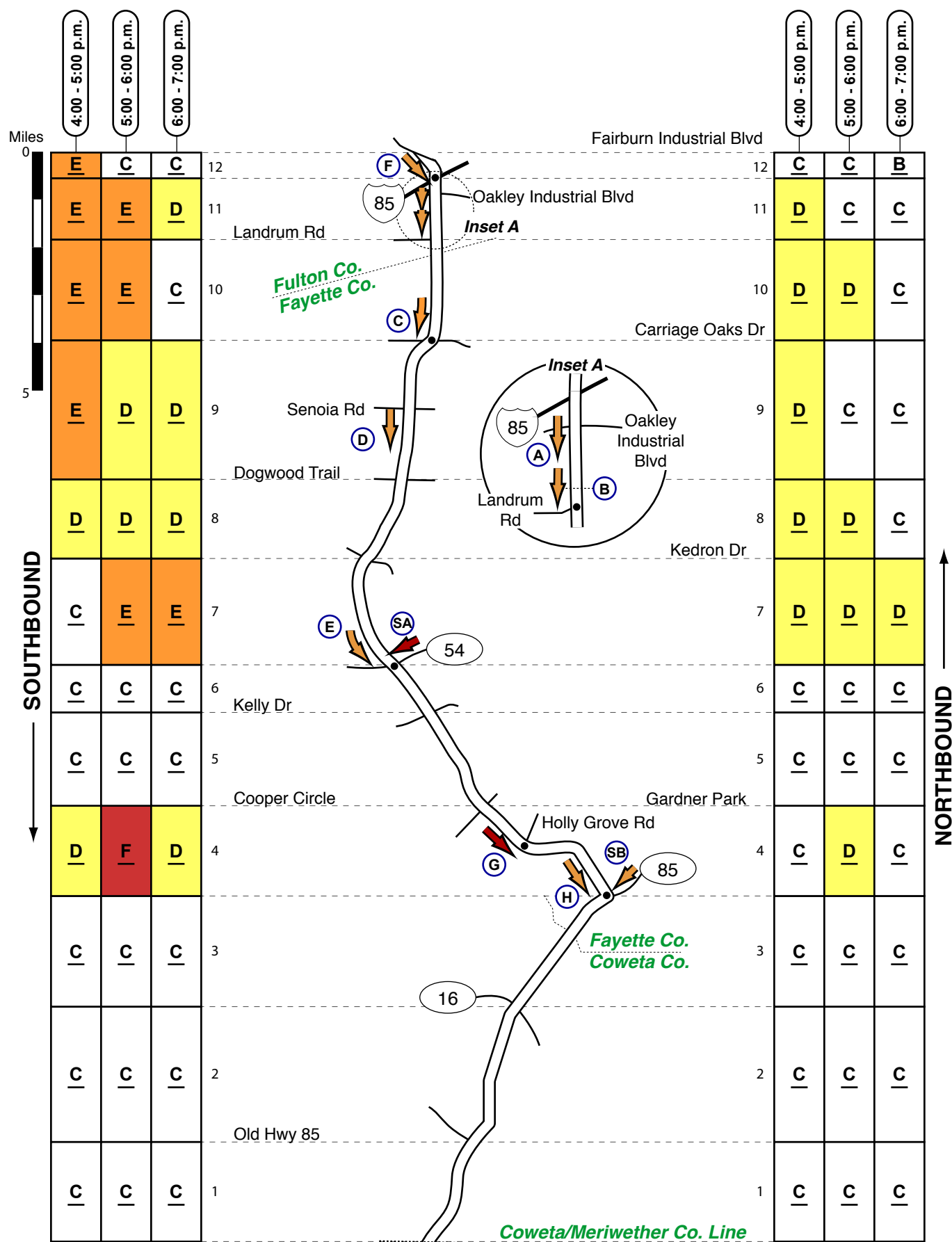
D

Congestion Type: Mainline Signal Queue
Location: Redwine Rd
Frequency: Intermittent
Direction: Northbound
Queue Population: 20 to 30 vpl
Number of Lanes: 1
Note: Large northbound platoons (one lane) were also found traveling between Redwine Rd and Cooper Circle.

E

Congestion Type: Cross Road Signal Queue
Location: Rockaway Rd
Frequency: Intermittent
Direction: Eastbound
Queue Population: 20 to 25 vpl
Number of Lanes: 1

SR 74 (Fulton/Fayette & Coweta Counties) - Evening



SR 74 (Fulton/Fayette & Coweta Counties) - Evening**A**

Congestion Type: Platoons
Location: Between I-85 & Landrum Rd
Frequency: Intermittent
Direction: Southbound
Platoon Population: 25 to 30 vpl
Number of Lanes: 2

B

Congestion Type: Mainline Signal Queue
Location: Landrum Rd
Frequency: Intermittent
Direction: Southbound
Queue Population: 20 to 30 vpl
Number of Lanes: 2

C

Congestion Type: Mainline Signal Queue/Platoons
Location: Carriage Oaks Dr
Frequency: Intermittent
Direction: Southbound
Queue Population: 20 to 30 vpl
Number of Lanes: 2

D

Congestion Type: Platoons
Location: Between Senoia Rd & Dogwood Trail
Frequency: Intermittent
Direction: Southbound
Platoon Population: 25 to 30 vpl
Number of Lanes: 2

E

Congestion Type: Mainline Signal Queue
Location: SR 54
Frequency: Intermittent
Direction: Southbound
Queue Population: 20 to 30 vpl
Number of Lanes: 3
Note: During some observations, congestion was limited to the dedicated right turn lane approaching SR 54.

F

Congestion Type: Mainline Signal Queue
Location: I-85
Frequency: Intermittent
Direction: Southbound
Population: 20 to 35 vpl
Number of Lanes: 2

G

Congestion Type: Mainline Signal Queue
Location: Holly Grove Rd
Frequency: Peak Hour
Direction: Southbound
Queue Population: 20 to 50 vpl
Number of Lanes: 1

H

Congestion Type: Mainline Signal Queue
Location: SR 85
Frequency: One time only
Direction: Southbound
Queue Population: 20 to 25 vpl
Number of Lanes: 1

SA

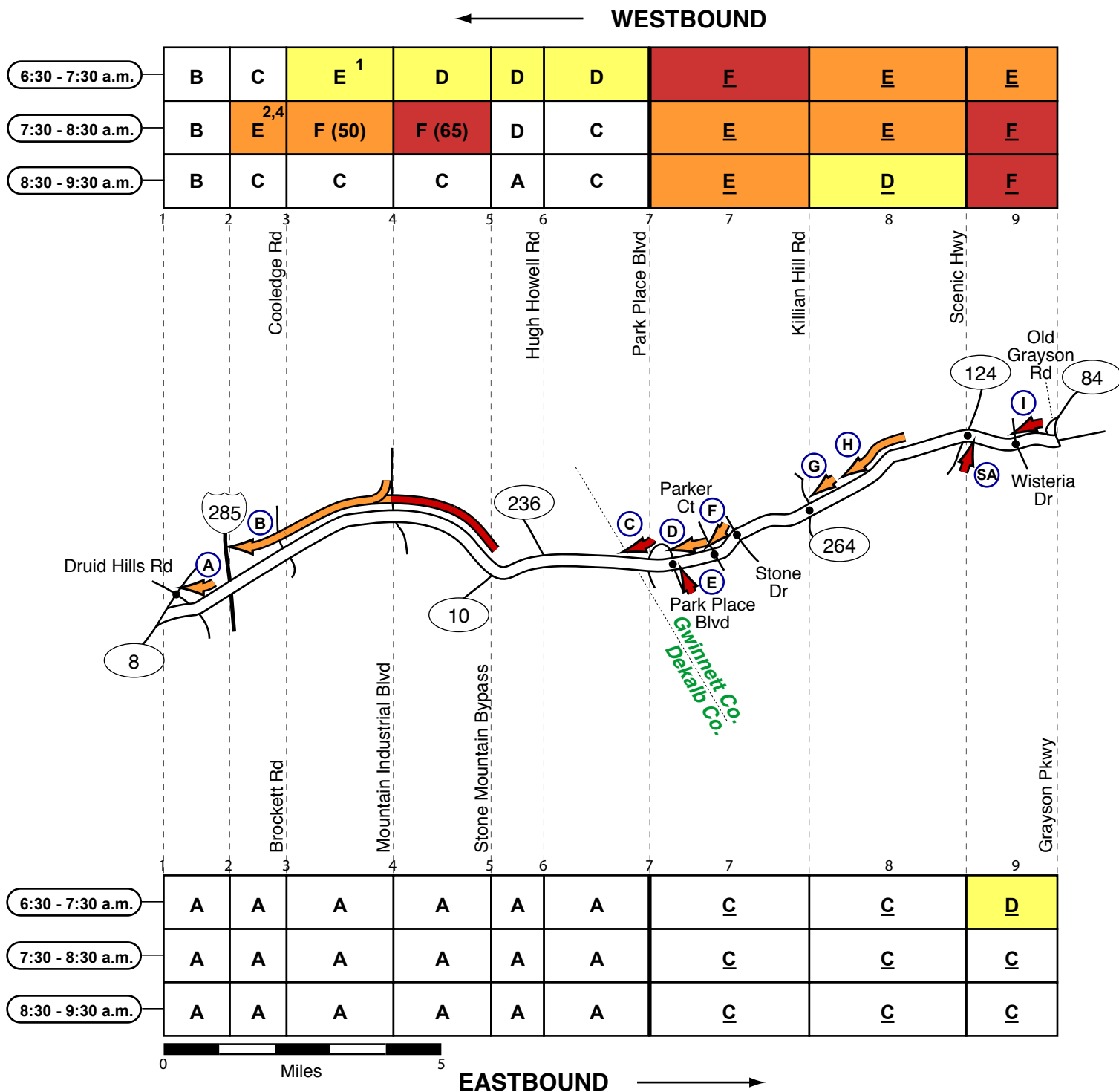
Congestion Type: Surveyed Cross Road Signal Queue
Location: SR 54
Frequency: Peak Hour
Direction: Westbound
Queue Population: 20 to 60 vpl
Number of Lanes: 2
Note: During one observation, approximately 100 vehicles per lane were queued at the signal.

SB

Congestion Type: Surveyed Cross Road Signal Queue
Location: SR 85
Frequency: Intermittent
Direction: Southbound
Queue Population: 20 to 40 vpl
Number of Lanes: 1

Spring 2010

US 78 (DeKalb & Gwinnett Counties) - Morning



Arterial LOS Legend

| | | | | | |
|------------|----------|----------|----------|-----------|----------|
| <u>A</u> | <u>B</u> | <u>C</u> | <u>D</u> | <u>E</u> | <u>F</u> |
| Very Light | Light | Moderate | Heavy | Congested | Severe |

US 78 (DeKalb & Gwinnett Counties) - Morning

A

Congestion Type: Exit Ramp Queue
Location: Druid Hills Rd
Frequency: Intermittent
Direction: Westbound
Queue Population: 20 to 40 vpl
Number of Lanes: 2
Note: When congested, the head of the ramp queue was found on westbound Druid Hills Rd at the signal at SR 8.

B

Congestion Type: Mainline Congestion
Frequency: Peak Hour
Direction: Westbound
Location: SR 10 and I-285
Queue Length: 4 to 5 miles
Estimated Speed: 30 to 50 mph
Potential Cause(s): Factors contributing to the congestion included: 1) congestion on the ramp to northbound I-285 backed into the right two lanes on US 78 and ultimately across all three lanes; 2) traffic entering the mainline at Stone Mountain Industrial Blvd and; 3) the weaving associated with the SR 10/US 78 split.

C

Congestion Type: Entrance Ramp Queue
Location: Park Place Blvd
Frequency: Peak Hour
Direction: Westbound
Queue Population: 20 to 30 vpl
Number of Lanes: 2
Note: The head of the queue was found at the ramp meter.

D

Congestion Type: Mainline Signal Queue
Location: Park Place Blvd
Frequency: Intermittent
Direction: Westbound
Queue Population: 20 to 40 vpl
Number of Lanes: 3

E

Congestion Type: Cross Road Signal Queue
Location: Park Place Blvd
Frequency: Peak Hour
Direction: Northbound
Queue Population: 20 to 30 vpl
Number of Lanes: 2
Note: The head of the queue was found in the two left-turn lanes at the signal; congestion typically extended back into the mainline of Park Place Blvd.

F

Congestion Type: Mainline Signal Queue
Location: Parker Ct
Frequency: Intermittent
Direction: Westbound
Queue Population: 20 to 40 vpl
Number of Lanes: 3

G

Congestion Type: Mainline Signal Queue
Location: SR 264
Frequency: Intermittent
Direction: Westbound
Queue Population: 20 to 50 vpl
Number of Lanes: 3

H

Congestion Type: Platoons
Location: Between SR 124 & SR 264
Frequency: Intermittent
Direction: Westbound
Platoon Population: 25 to 35 vpl
Number of Lanes: 3

I

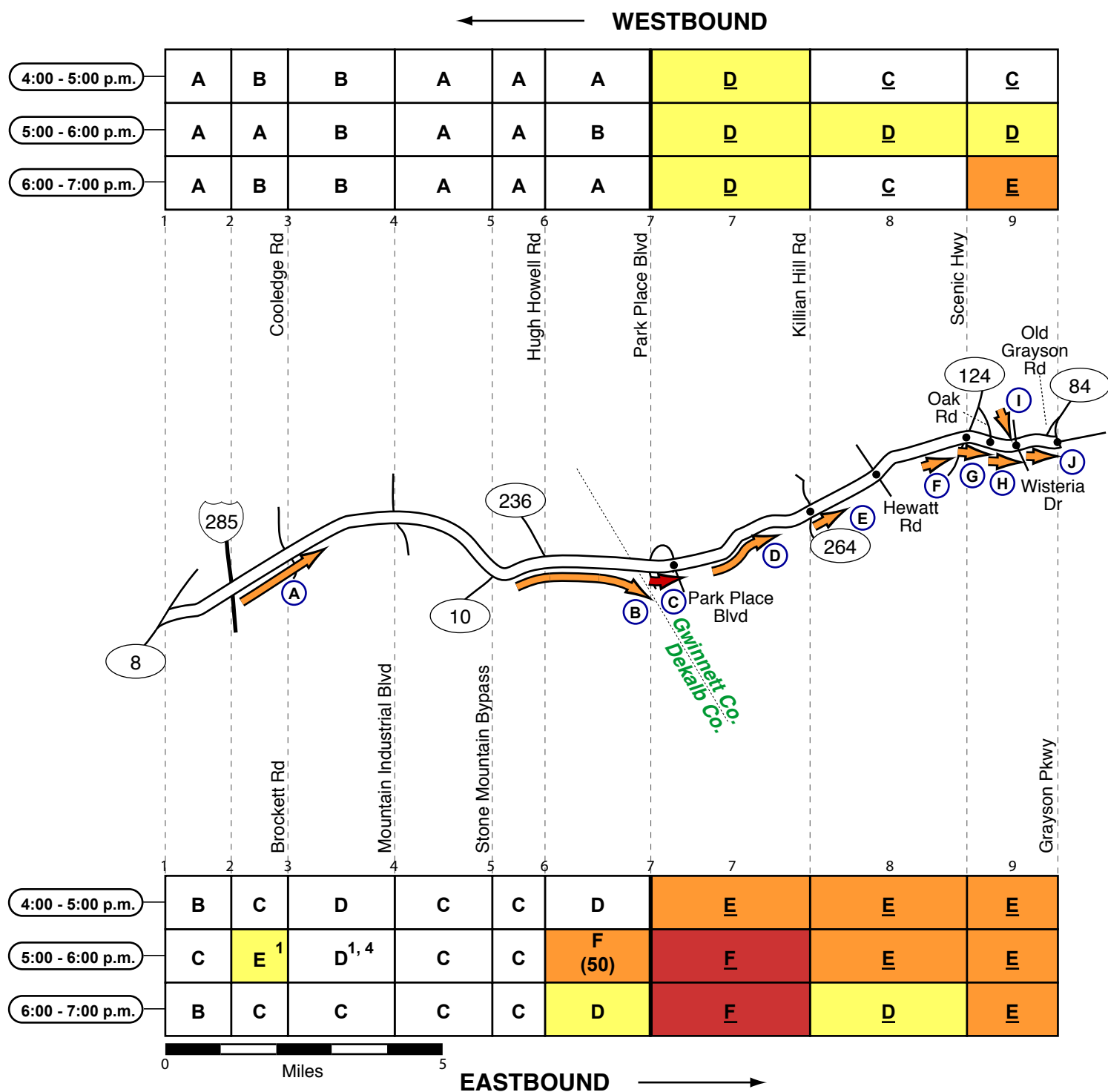
Congestion Type: Mainline Signal Queue
Location: Wisteria Dr
Frequency: Most Observations
Direction: Westbound
Queue Population: 30 to 80 vpl
Number of Lanes: 2
Note: On three of four days, congestion backed through the upstream signal at Abington Lane

SA

Congestion Type: Surveyed Cross Road Signal Queue
Location: SR 124
Frequency: Peak Hour
Direction: Northbound
Queue Population: 20 to 30 vpl
Number of Lanes: 2

Spring 2010

US 78 (DeKalb & Gwinnett Counties) - Evening



Arterial LOS Legend

| | | | | | |
|------------|----------|----------|----------|-----------|----------|
| <u>A</u> | <u>B</u> | <u>C</u> | <u>D</u> | <u>E</u> | <u>F</u> |
| Very Light | Light | Moderate | Heavy | Congested | Severe |

US 78 (Dekalb & Gwinnett Counties) - Evening

A

Congestion Type: Mainline Congestion
Frequency: On two of four surveyed evenings
Direction: Eastbound
Location: Between I-285 and Cooledge Rd
Queue Length: 1 to 1.5 miles
Estimated Speed: 30 to 50 mph
Potential Cause(s): Congestion appeared to be caused by traffic entering the mainline from northbound I-285 and the lane drop (4 lanes to 3) at Cooledge Rd.

B

Congestion Type: Mainline Congestion
Frequency: Peak Hour
Direction: Eastbound
Location: Between SR 236 and Park Place Blvd
Queue Length: 1 to 2 miles
Estimated Speed: 30 to 50 mph
Potential Cause(s): Congestion appeared to be exacerbated by vehicles exiting at the service road approximately one-half mile before the Park Place Blvd interchange; weaving on the approach to the exit ramp may have contributed to the congestion.

C

Congestion Type: Mainline Signal Queue
Location: Park Place Blvd
Frequency: Most Observations
Direction: Eastbound
Queue Population: 20 to 60 vpl
Number of Lanes: 3

D

Congestion Type: Platoons
Location: Between E. Park Place Blvd & SR 264
Frequency: Intermittent
Direction: Eastbound
Platoon Population: 25 to 35 vpl
Number of Lanes: 3

E

Congestion Type: Platoons
Location: Between SR 264 and SR 124
Frequency: Intermittent
Direction: Eastbound
Platoon Population: 25 to 35 vpl
Number of Lanes: 3

F

Congestion Type: Mainline Signal Queue
Location: SR 124
Frequency: One time only
Direction: Eastbound
Queue Population: 20 to 30 vpl
Number of Lanes: 2

G

Congestion Type: Mainline Signal Queue
Location: Oak Rd
Frequency: Intermittent
Direction: Eastbound
Queue Population: 20 to 30 vpl
Number of Lanes: 2

H

Congestion Type: Mainline Signal Queue
Location: Wisteria Dr
Frequency: Intermittent
Direction: Eastbound
Queue Population: 20 to 30 vpl
Number of Lanes: 2

I

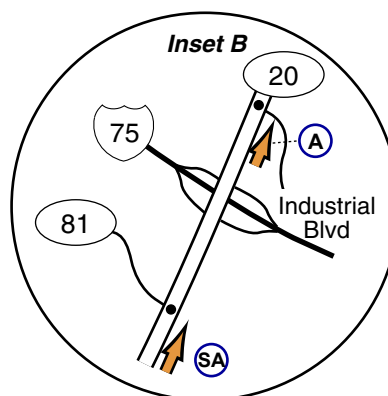
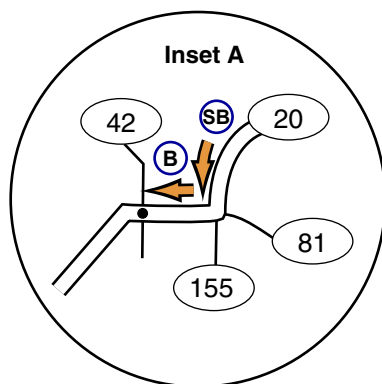
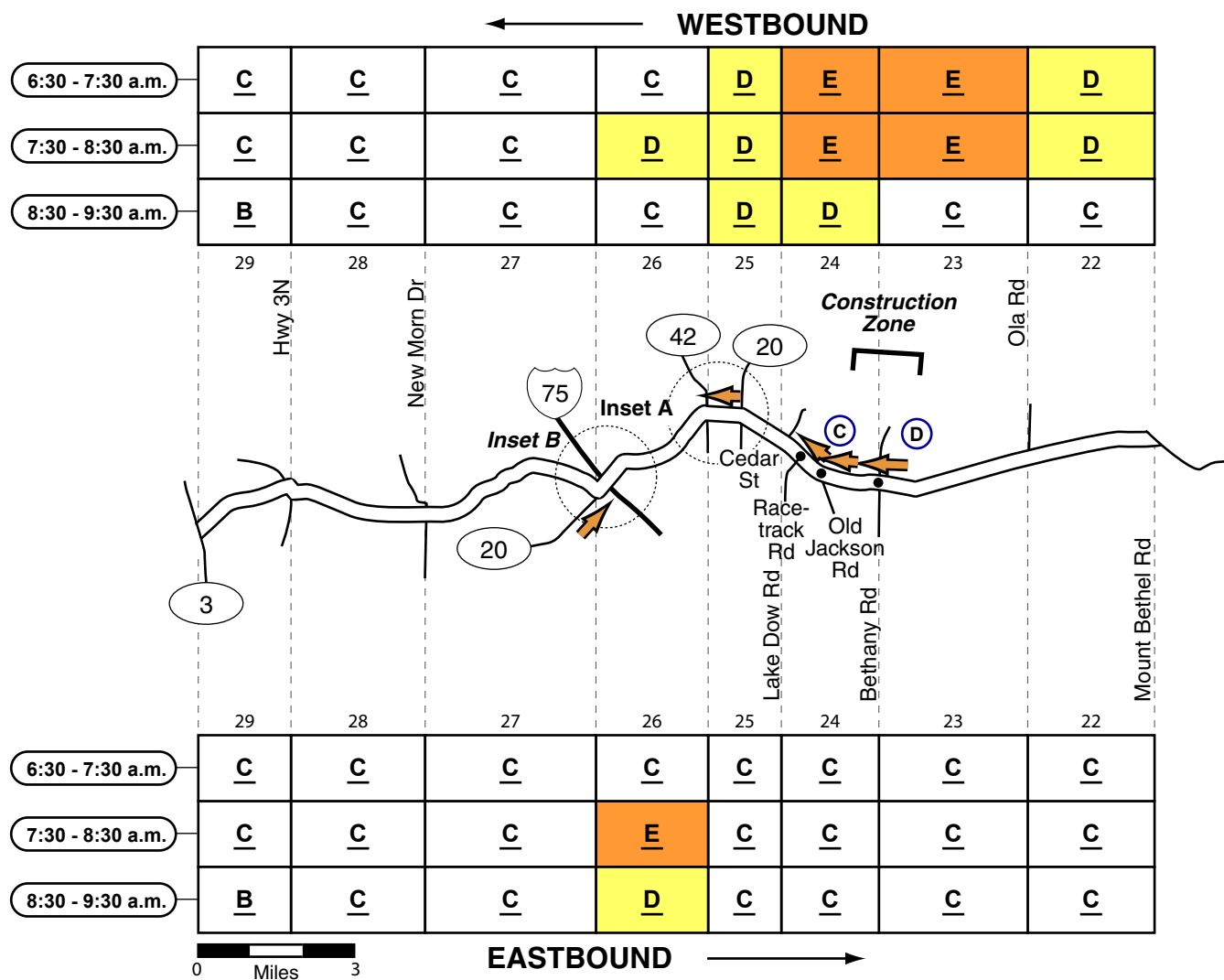
Congestion Type: Cross Road Signal Queue
Location: Wisteria Dr
Frequency: Intermittent
Direction: Southbound
Queue Population: 20 to 30 vpl
Number of Lanes: 2

J

Congestion Type: Mainline Signal Queue
Location: SR 84
Frequency: Intermittent
Direction: Eastbound
Queue Population: 20 to 30 vpl
Number of Lanes: 2

Spring 2010

SR 81 (Henry County) - Morning



Arterial LOS Legend

| A | B | C | D | E | F |
|------------|-------|----------|-------|-----------|--------|
| Very Light | Light | Moderate | Heavy | Congested | Severe |

SR 81 (Henry County) - Morning

A

Congestion Type: Mainline Signal Queue
Location: Industrial Blvd / Willow Ln
Frequency: Intermittent
Direction: Northbound
Queue Population: 20 to 25 vpl
Number of Lanes: 1

B

Congestion Type: Mainline Signal Queue
Location: SR 42
Frequency: Intermittent
Direction: Westbound
Queue Population: 20 to 30 vpl
Number of Lanes: 1
Note: The head of the queue was found in the one thru-lane at the signal

C

Congestion Type: Mainline Signal Queues
Location: Old Jackson Rd & Racetrack Rd
Frequency: Intermittent
Direction: Westbound
Queue Population: 20 to 30 vpl
Number of Lanes: 1

D

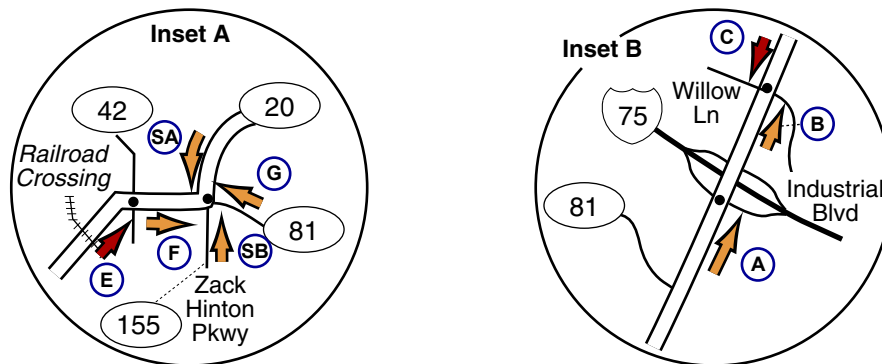
Congestion Type: Mainline Queue/Platoons
Location: Bethany Rd
Frequency: Peak Hour
Direction: Westbound
Queue Population: 25 to 30 vpl
Number of Lanes: 1
Note: Constructon at the SR 81/Bethany Rd intersection may have caused or exacerbated the congestion.

SA

Congestion Type: Surveyed Cross Road Signal Queue
Location: SR 81
Frequency: Intermittent
Direction: Northbound
Queue Population: 20 to 30 vpl
Number of Lanes: 2

SB

Congestion Type: Surveyed Cross Road Signal Queue
Location: SR 20
Frequency: Intermittent
Direction: Southbound
Queue Population: 20 to 25 vpl
Number of Lanes: 1



SR 81 (Henry County) - Evening

A

Congestion Type: Mainline Signal Queue
Location: I-75
Frequency: Intermittent
Direction: Northbound
Queue Population: 20 to 30 vpl
Number of Lanes: 2

B

Congestion Type: Mainline Signal Queue
Location: Industrial Blvd / Willow Ln
Frequency: Intermittent
Direction: Northbound
Queue Population: 20 to 40 vpl
Number of Lanes: 1

C

Congestion Type: Mainline Signal Queue
Location: Willow Ln
Frequency: Most Observations
Direction: Southbound
Queue Population: 20 to 30 vpl
Number of Lanes: 2

D

Congestion Type: Cross Road Signal Queue
Location: McDonough-Lovejoy Rd
Frequency: Intermittent
Direction: Northbound
Queue Population: 20 to 30 vpl
Number of Lanes: 1
Note: When congested, the head of the queue was found in the dedicated right-turn lane where vehicles waited to merge into northbound flow on SR 20/81.

E

Congestion Type: Mainline Signal Queue
Location: SR 42
Frequency: Most Observations
Direction: Northbound
Queue Population: 20 to 40 vpl
Number of Lanes: 1

F

Congestion Type: Mainline Signal Queue
Location: SR 20
Frequency: One Time Only
Direction: Eastbound
Queue Population: 25 to 30 vpl
Number of Lanes: 2

G

Congestion Type: Mainline Signal Queue
Location: SR 20 (Cedar St)
Frequency: Intermittent
Direction: Westbound
Queue Population: 20 to 25 vpl
Number of Lanes: 2

H

Congestion Type: Mainline Signal Queue
Location: Old Jackson Rd
Frequency: Most Observations
Direction: Eastbound
Queue Population: 20 to 40 vpl
Number of Lanes: 1

I

Congestion Type: Mainline Queue
Location: Racetrack Rd
Frequency: Intermittent
Direction: Westbound
Queue Population: 20 to 40 vpl
Number of Lanes: 1
Note: Congestion appeared to be caused by left-turning vehicles at Racetrack Rd.

J

Congestion Type: Platoons
Location: Between Bethany Rd & Ola Rd
Frequency: Intermittent
Direction: Eastbound
Platoon Population: 25 to 30 vpl
Number of Lanes: 1

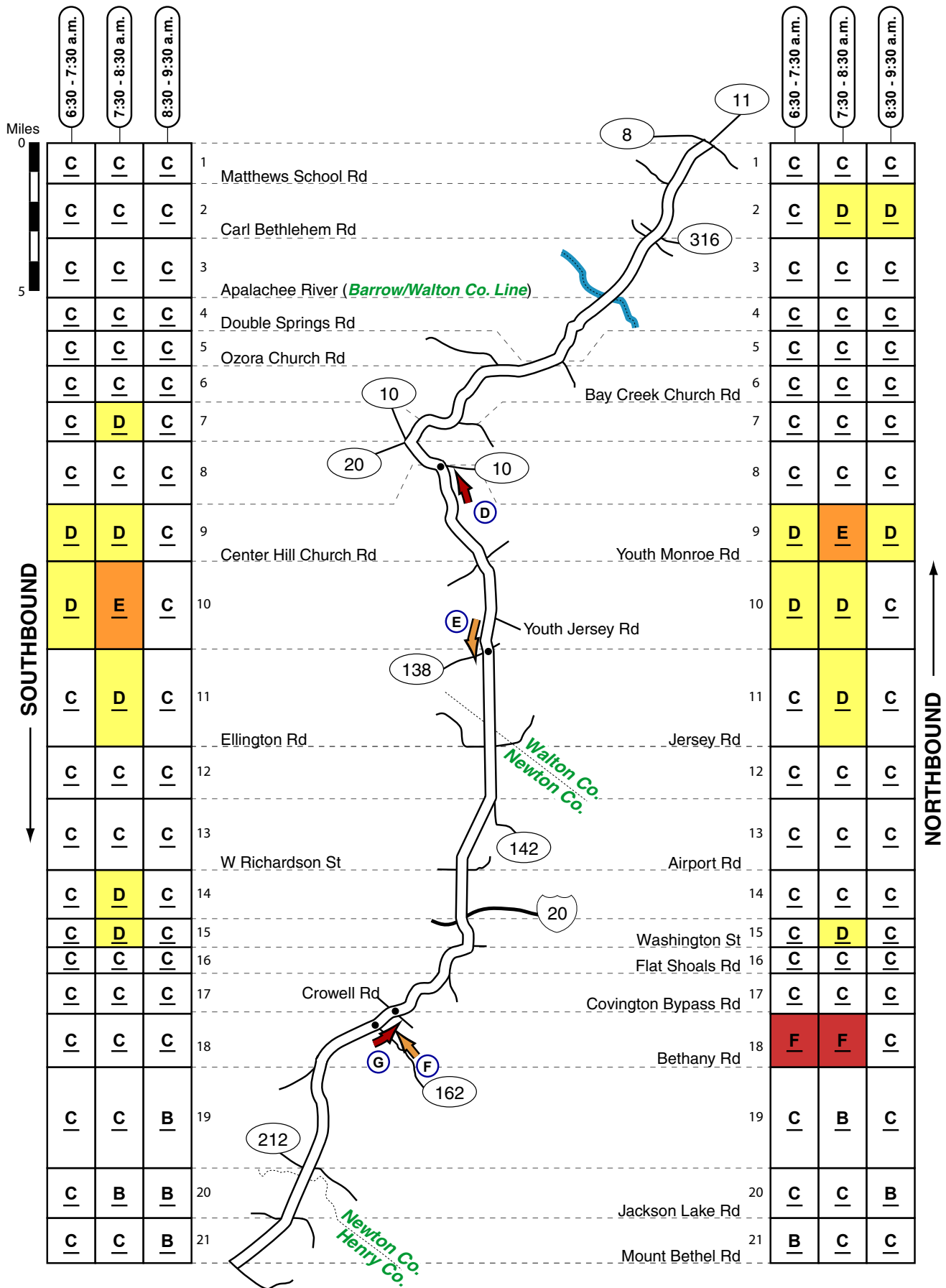
SA

Congestion Type: Surveyed Cross Road Signal Queue
Location: SR 20
Frequency: Intermittent
Direction: Southbound
Queue Population: 20 to 35 vpl
Number of Lanes: 1

SB

Congestion Type: Surveyed Cross Road Signal Queue
Location: SR 155
Frequency: Intermittent
Direction: Northbound
Queue Population: 20 to 30 vpl
Number of Lanes: 1

SR 81 (Barrow/Walton/Newton & Henry Counties) - Morning



SR 81 (Barrow/Walton/Newton & Henry Counties) - Morning

D

Congestion Type: Mainline Signal Queue

Location: SR 10

Frequency: Peak Hour

Direction: Northbound

Queue Population: 20 to 40 vpl

Number of Lanes: 1

E

Congestion Type: Mainline Signal Queue

Location: SR 138

Frequency: Intermittent

Direction: Southbound

Queue Population: 20 to 25 vpl

Number of Lanes: 1

F

Congestion Type: Cross Road Signal Queue

Location: SR 162 (Jackson Rd)

Frequency: Intermittent

Direction: Northbound

Queue Population: 20 to 30 vpl

Number of Lanes: 1

G

Congestion Type: Mainline Signal Queue

Location: Crowell Rd / Covington Bypass Rd

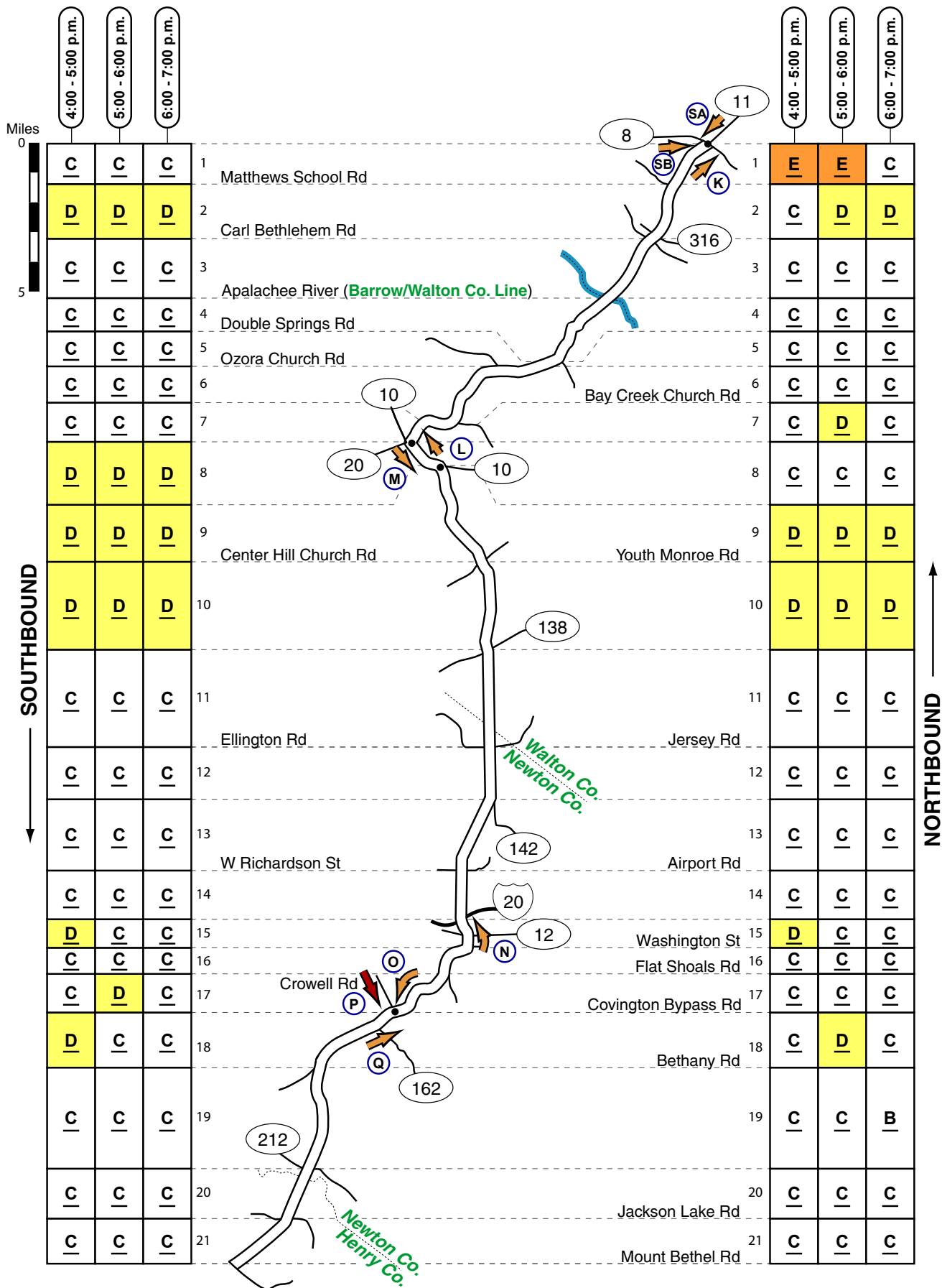
Frequency: Most Observations

Direction: Northbound

Queue Population: 20 to 60 vpl

Number of Lanes: 1

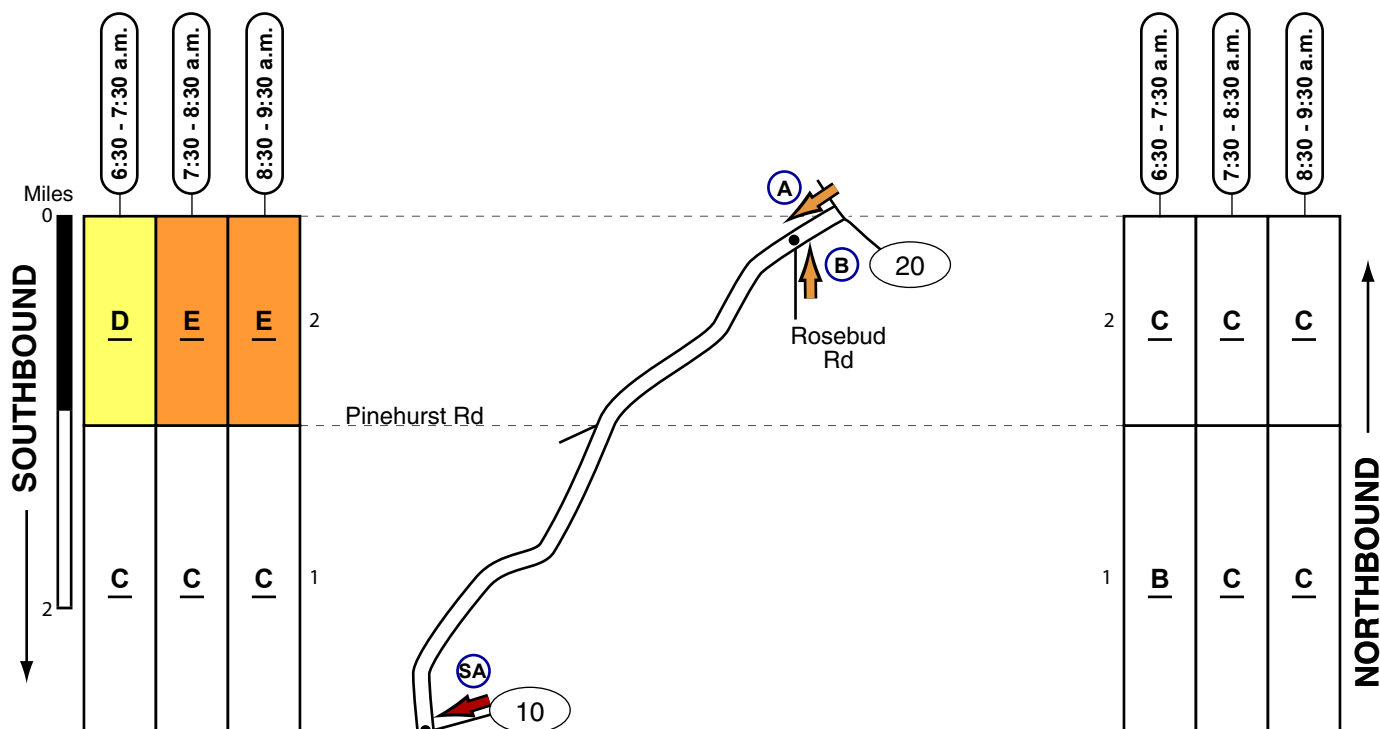
Spring 2010

SR 81 (Barrow/Walton/Newton & Henry Counties) - Evening

SR 81 (Barrow/ Walton/Newton & Henry Counties) - Evening

| | |
|---|---|
| K Congestion Type: Mainline Signal Queue Location: SR 8 Frequency: Intermittent Direction: Northbound Queue Population: 20 to 25 vpl Number of Lanes: 1 | SB Congestion Type: Surveyed Cross Road Signal Queue Location: SR 8 Frequency: One day only Direction: Eastbound Queue Population: 20 to 25 vpl Number of Lanes: 1 |
| L Congestion Type: Mainline Signal Queue Location: SR 10 Frequency: Intermittent Direction: Westbound Queue Population: 20 to 30 vpl Number of Lanes: 2 | |
| M Congestion Type: Mainline Signal Queue Location: SR 10 Frequency: Intermittent Direction: Southbound Population: 20 to 30 vpl Number of Lanes: 1 | |
| N Congestion Type: Mainline Queue Location: Railroad Crossing vicinity of SR 12 Frequency: Intermittent Direction: Northbound Queue Population: 20 to 30 vpl Number of Lanes: 1 | |
| O Congestion Type: Mainline Signal Queue Location: Crowell Rd / Covington Bypass Rd Frequency: One Time Only Direction: Southbound Queue Population: 20 to 30 vpl Number of Lanes: 1 | |
| P Congestion Type: Cross Road Signal Queue Location: Crowell Rd Frequency: Most Observations Direction: Southbound Queue Population: 20 to 35 vpl Number of Lanes: 1 | |
| Q Congestion Type: Mainline Signal Queue Location: Covington Bypass Rd / Crowell Rd Frequency: One Time Only Direction: Northbound Queue Population: 20 to 30 vpl Number of Lanes: 1 | |
| SA Congestion Type: Surveyed Cross Road Signal Queue Location: SR 11 Frequency: Intermittent Direction: Southbound Queue Population: 20 to 30 vpl Number of Lanes: 1 | |

SR 84 (Gwinnett County) - Morning



A

Congestion Type: Mainline Signal Queue
 Location: Rosebud Rd
 Frequency: Intermittent
 Direction: Southbound
 Queue Population: 20 to 40 vpl
 Number of Lanes: 1

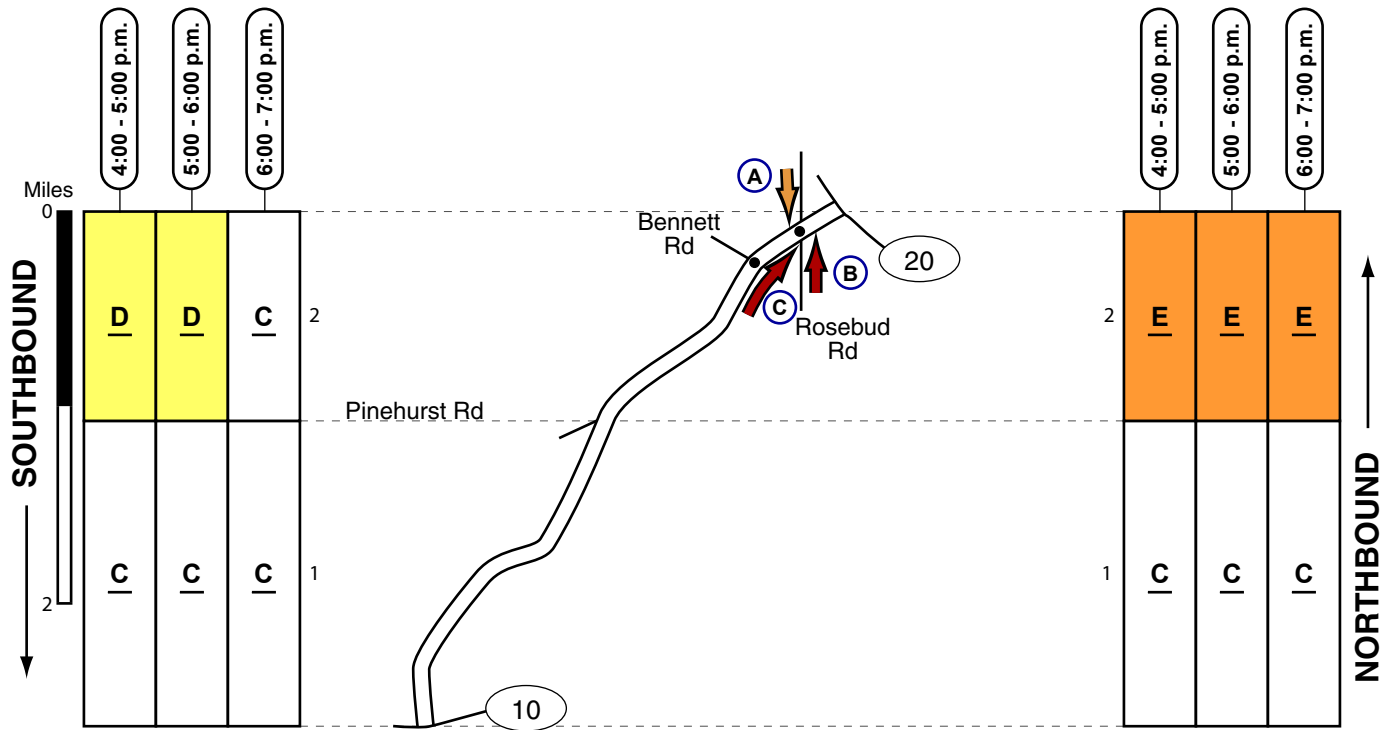
SA

Congestion Type: Surveyed Cross Road Signal Queue
 Location: SR 10
 Frequency: Most Observations
 Direction: Westbound
 Queue Population: 20 to 40 vpl
 Number of Lanes: 2

B

Congestion Type: Cross Road Signal Queue
 Location: Rosebud Rd
 Frequency: Intermittent
 Direction: Northbound
 Queue Population: 20 to 30 vpl
 Number of Lanes: 1
 Note: During one observation, approximately 50 vehicles were queued at the signal.

SR 84 (Gwinnett County) - Evening



A
 Congestion Type: Cross Road Signal Queue
 Location: Rosebud Rd
 Frequency: Intermittent
 Direction: Southbound
 Queue Population: 20 to 30 vpl
 Number of Lanes: 1

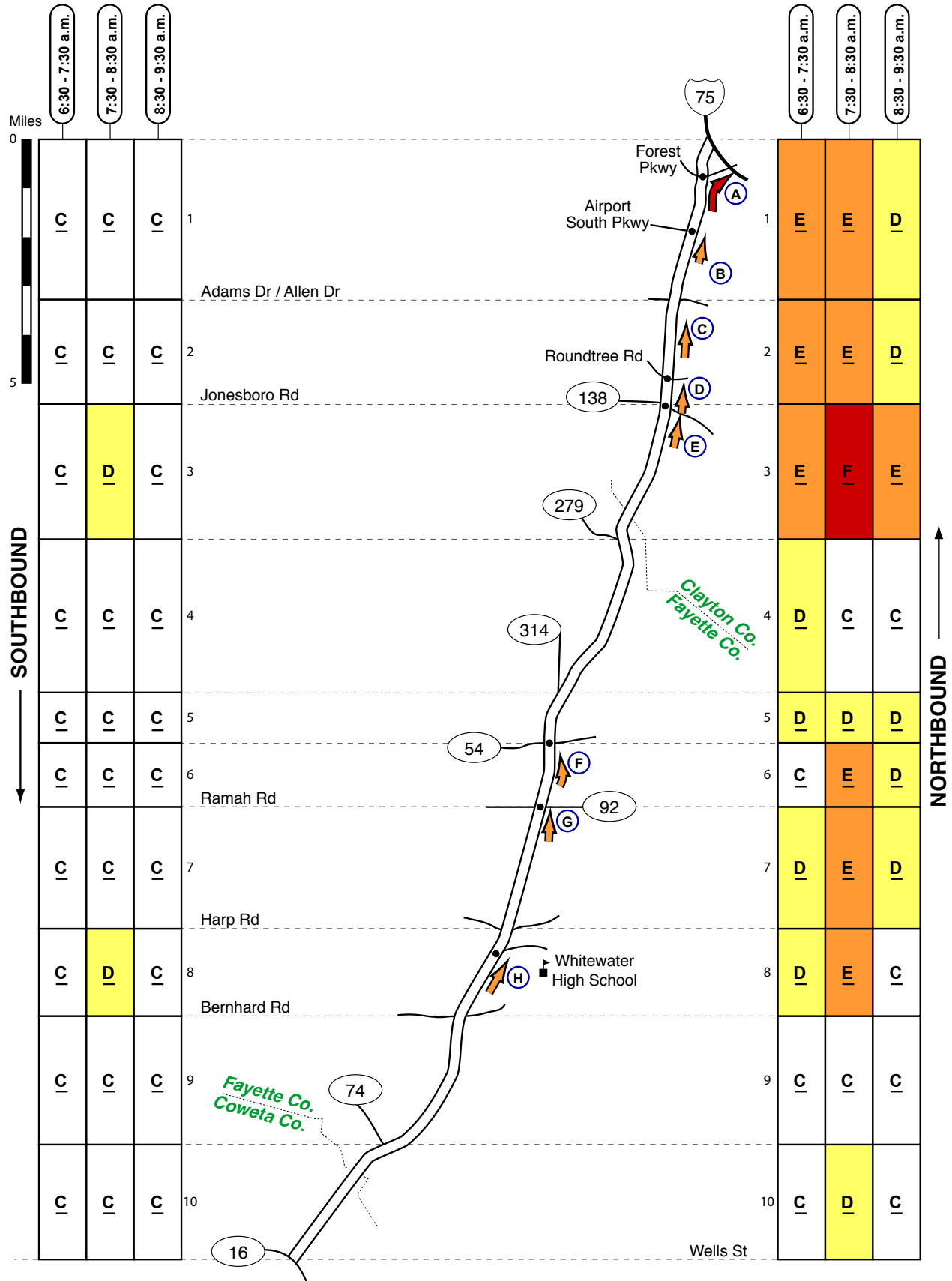
B
 Congestion Type: Cross Road Signal Queue
 Location: Rosebud Rd
 Frequency: Peak Hour
 Direction: Northbound
 Queue Population: 20 to 40 vpl
 Number of Lanes: 1

C
 Congestion Type: Mainline Signal Queue
 Location: Rosebud Rd
 Frequency: Peak Hour
 Direction: Northbound
 Queue Population: 20 to 60 vpl
 Number of Lanes: 1
 Note: During the peak period, congestion typically extended back through the upstream signal at Bennett Rd

Arterial LOS Legend

| A | B | C | D | E | F |
|------------|-------|----------|-------|-----------|--------|
| Very Light | Light | Moderate | Heavy | Congested | Severe |

SR 85 (Clayton/Fayette & Coweta Counties) - Morning



SR 85 (Clayton/Fayette & Coweta Counties) - Morning**A**

Congestion Type: Congestion - Right Lane

Location: Forest Pkwy

Frequency: Most Observations

Direction: Northbound

Queue Population: 20 to 40 vpl

Number of Lanes: 1

Note: When congested, vehicles were queued in the right lane on SR 85 approaching the intersection at Forest Pkwy; the head of the queue was intermittently found downstream on the ramp to I-75.

B

Congestion Type: Mainline Signal Queue

Location: Airport South Pkwy

Frequency: Intermittent

Direction: Northbound

Queue Population: 20 to 30 vpl

Number of Lanes: 2

C

Congestion Type: Platoons

Location: Between Roundtree Rd & Adams Dr

Frequency: Intermittent

Direction: Northbound

Queue Population: 25 to 30 vpl

Number of Lanes: 2

D

Congestion Type: Mainline Signal Queue

Location: Roundtree Rd

Frequency: Intermittent

Direction: Northbound

Queue Population: 20 to 30 vpl

Number of Lanes: 2

E

Congestion Type: Mainline Signal Queue

Location: SR 138

Frequency: Intermittent

Direction: Northbound

Queue Population: 20 to 30 vpl

Number of Lanes: 2

Note: On one morning, severe northbound congestion was found on SR 85 approaching the signal at SR 138; congestion extended back through several upstream signals.

F

Congestion Type: Mainline Signal Queue

Location: SR 54

Frequency: Intermittent

Direction: Northbound

Queue Population: 20 to 25 vpl

Number of Lanes: 2

G

Congestion Type: Mainline Signal Queue

Location: SR 92 (Ramah Rd)

Frequency: Intermittent

Direction: Northbound

Queue Population: 20 to 25 vpl

Number of Lanes: 1

H

Congestion Type: Mainline Signal Queue

Location: Whitewater High School

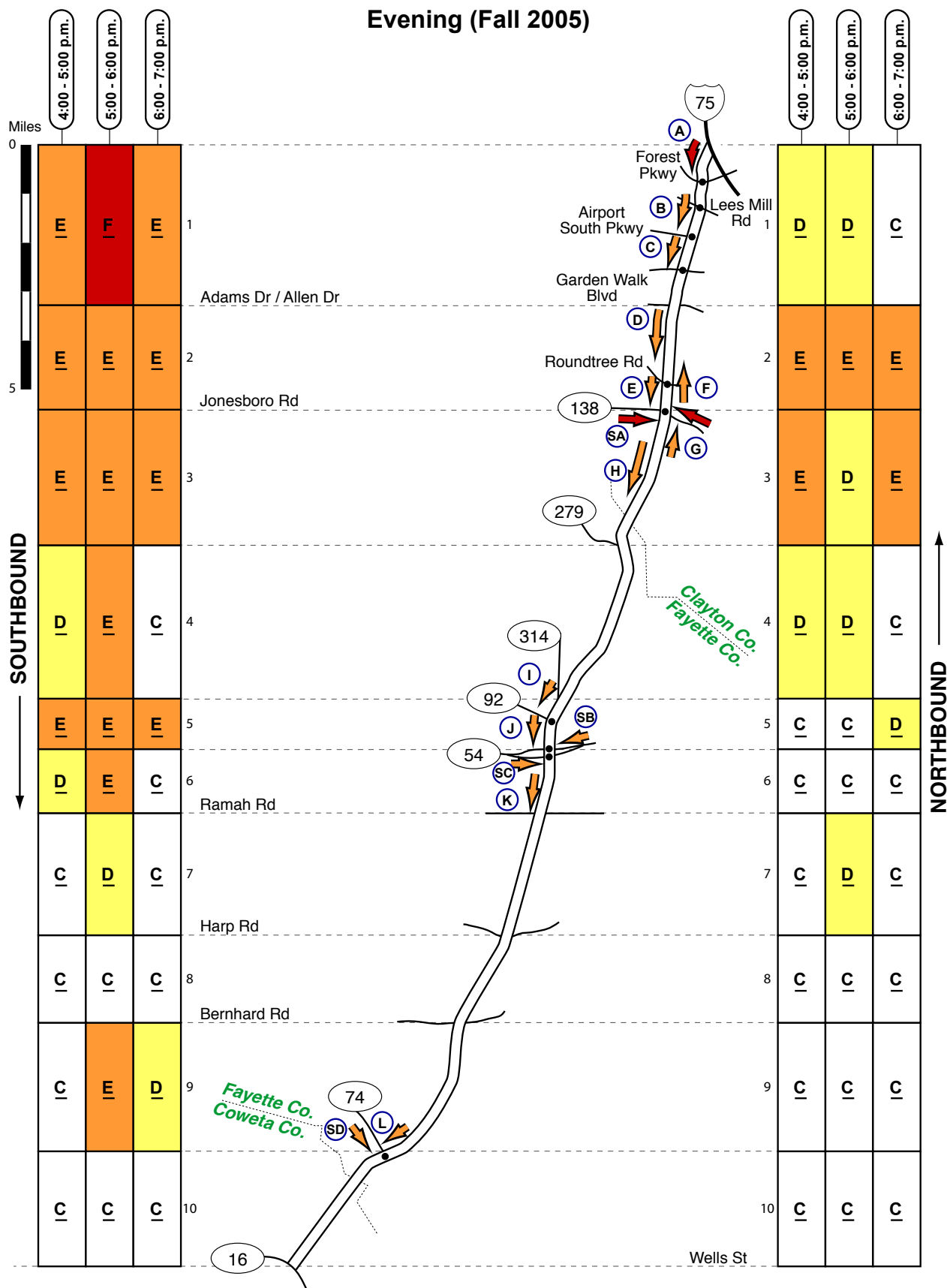
Frequency: Peak Hour

Direction: Northbound

Queue Population: 20 to 25 vpl

Number of Lanes: 1

SR 85 (Clayton/Fayette & Coweta Counties) - Evening



Arterial LOS Legend

| A | B | C | D | E | F |
|------------|-------|----------|-------|-----------|--------|
| Very Light | Light | Moderate | Heavy | Congested | Severe |

SR 85 (Clayton/Fayette & Coweta Counties) - Evening**A**

Congestion Type: Mainline Signal Queue
 Location: Forest Pkwy
 Frequency: Most Observations
 Direction: Southbound
 Queue Population: 20 to 70 vpl
 Number of Lanes: 2

B

Congestion Type: Platoons
 Location: Between Forest Pkwy & Garden Walk Blvd
 Frequency: Intermittent
 Direction: Southbound
 Queue Population: 20 to 40 vpl
 Number of Lanes: 2
 Note: During some observations, congestion was found at the signals at Lees Mill Rd and Airport South Pkwy; downstream congestion sometimes appeared to affect thru traffic at these signals.

C

Congestion Type: Mainline Signal Queue
 Location: Garden Walk Blvd
 Frequency: One Time Only
 Direction: Southbound
 Queue Population: 20 to 25 vpl
 Number of Lanes: 2

D

Congestion Type: Platoons/Queues
 Location: Between Adams Dr & Roundtree Rd
 Frequency: Intermittent
 Direction: Southbound
 Queue Population: 25 to 40 vpl
 Number of Lanes: 2

E

Congestion Type: Mainline Signal Queue
 Location: SR 138
 Frequency: Intermittent
 Direction: Southbound
 Queue Population: 20 to 30 vpl
 Number of Lanes: 2

F

Congestion Type: Signal Queue/Platoons
 Location: Vicinity of Roundtree Rd
 Frequency: Intermittent
 Direction: Northbound
 Queue Population: 20 to 25 vpl
 Number of Lanes: 2

G

Congestion Type: Mainline Signal Queue
 Location: SR 138
 Frequency: Intermittent
 Direction: Northbound
 Queue Population: 20 to 25 vpl
 Number of Lanes: 2

H

Congestion Type: Platoons
 Location: Between SR 138 & SR 279
 Frequency: Intermittent
 Direction: Southbound
 Queue Population: 25 to 35 vpl
 Number of Lanes: 2

I

Congestion Type: Mainline Signal Queue
 Location: SR 92 (Forrest Ave)
 Frequency: Intermittent
 Direction: Southbound
 Queue Population: 20 to 25 vpl
 Number of Lanes: 2

J

Congestion Type: Mainline Signal Queue
 Location: SR 54 (Lanier Ave)
 Frequency: Intermittent
 Direction: Southbound
 Queue Population: 20 to 25 vpl
 Number of Lanes: 2

K

Congestion Type: Platoons
 Location: Between SR 54 & SR 92 (Ramah Rd)
 Frequency: Intermittent
 Direction: Southbound
 Platoon Population: 25 to 30 vpl
 Number of Lanes: 1
 Note: Large southbound platoons were found in the one-lane section of SR 85 between Grady Ave and SR 92.

L

Congestion Type: Mainline Signal Queue
 Location: SR 74
 Frequency: Intermittent
 Direction: Southbound
 Queue Population: 20 to 40 vpl
 Number of Lanes: 1

SA

Congestion Type: Surveyed Cross Road Signal Queue
 Location: SR 138
 Frequency: Most Observations
 Direction: Eastbound
 Queue Population: 20 to 40 vpl
 Number of Lanes: 2

SB

Congestion Type: Surveyed Cross Road Signal Queue
 Location: SR 54
 Frequency: Intermittent
 Direction: Westbound
 Queue Population: 20 to 30 vpl
 Number of Lanes: 2

SC

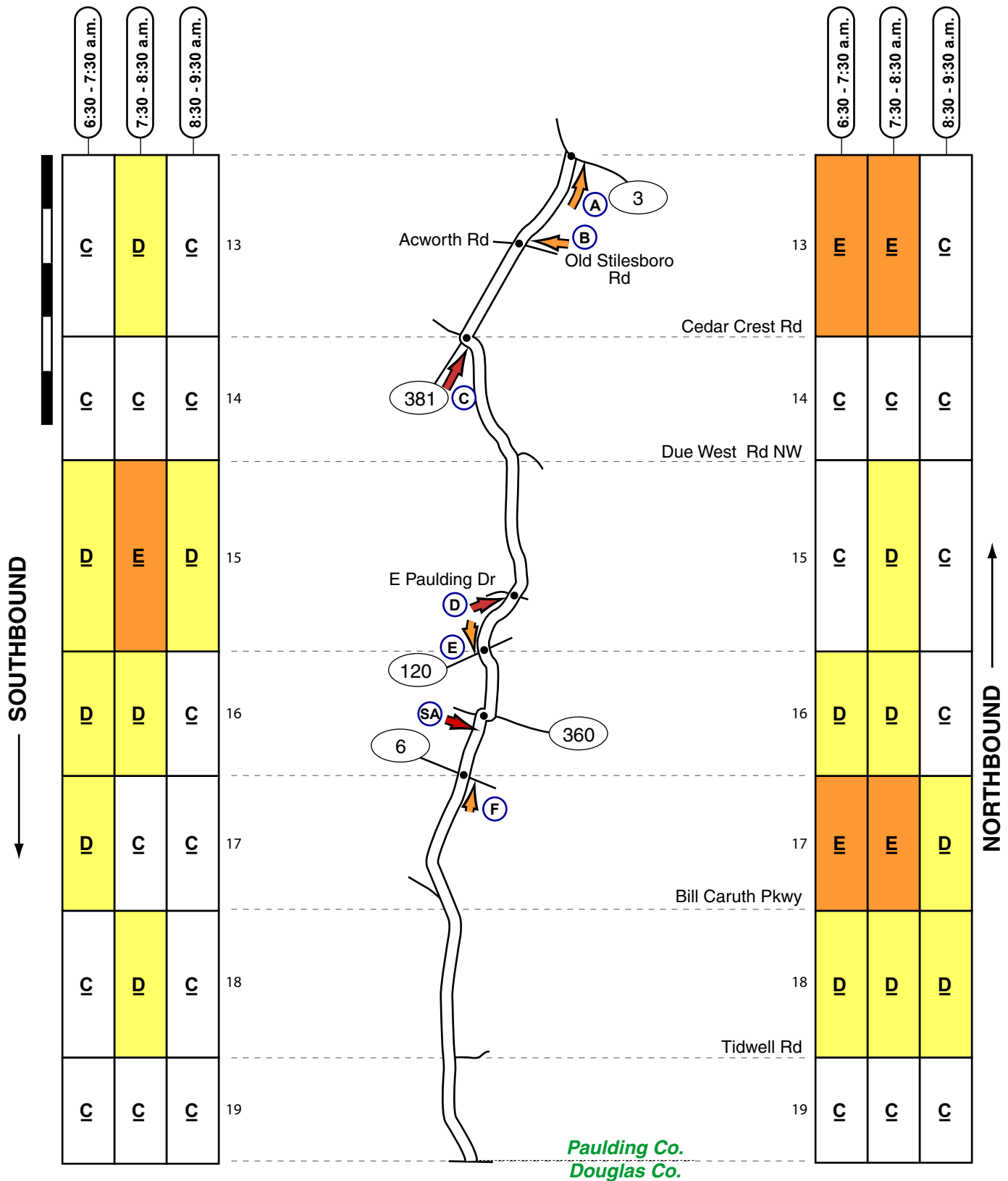
Congestion Type: Surveyed Cross Road Signal Queue
 Location: SR 54
 Frequency: Intermittent
 Direction: Eastbound
 Queue Population: 20 to 35 vpl
 Number of Lanes: 3

SD

Congestion Type: Surveyed Cross Road Signal Queue
 Location: SR 74
 Frequency: One time only
 Direction: Southbound
 Queue Population: 20 to 25 vpl
 Number of Lanes: 1

Spring 2010

SR 92/Highway 92 (Paulding County) - Morning



SR 92/Highway 92 (Paulding County) - Morning

A

Congestion Type: Mainline Signal Queue
 Location: SR 3
 Frequency: Intermittent
 Direction: Northbound
 Queue Population: 20 to 30 vpl
 Number of Lanes: 1

B

Congestion Type: Cross Road Signal Queue
 Location: Old Stilesboro Rd
 Frequency: Intermittent
 Direction: Westbound
 Queue Population: 20 to 25 vpl
 Number of Lanes: 1

C

Congestion Type: Cross Road Signal Queue
 Location: SR 381
 Frequency: Peak Hour
 Direction: Northbound
 Queue Population: 20 to 40 vpl
 Number of Lanes: 1

D

Congestion Type: Cross Road Signal Queue
 Location: E. Paulding Dr
 Frequency: Peak Hour
 Direction: Eastbound
 Queue Population: 20 to 35 vpl
 Number of Lanes: 1

E

Congestion Type: Mainline Signal Queue
 Location: SR 120
 Frequency: Intermittent
 Direction: Southbound
 Queue Population: 20 to 40 vpl
 Number of Lanes: 1

F

Congestion Type: Mainline Signal Queue
 Location: SR 6
 Frequency: Intermittent
 Direction: Northbound
 Queue Population: 20 to 25 vpl
 Number of Lanes: 1

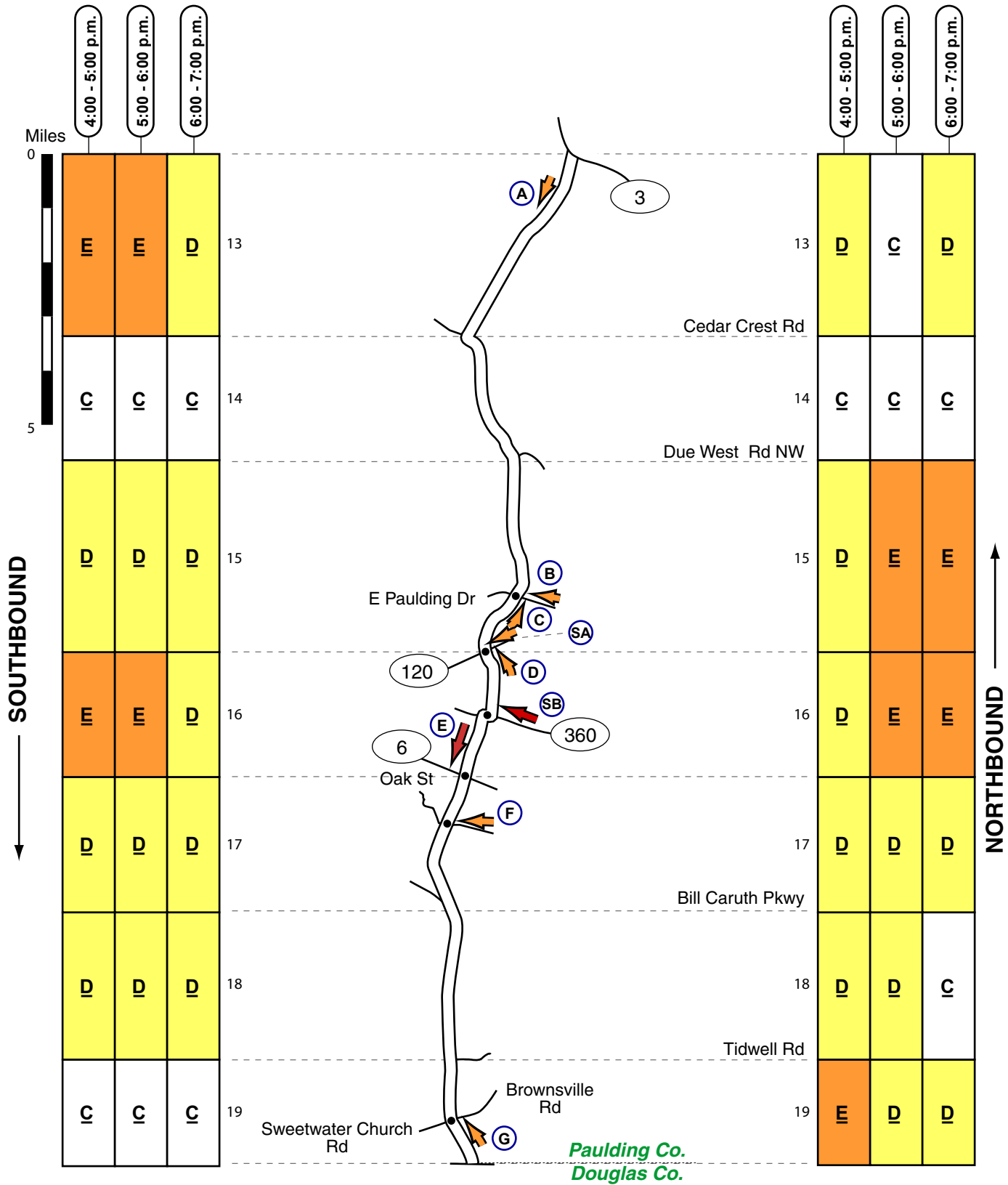
SA

Congestion Type: Surveyed Cross Road Signal Queue
 Location: SR 360
 Frequency: Most observations before 8:00 a.m.
 Direction: Eastbound
 Queue Population: 20 to 45 vpl
 Number of Lanes: 1

Arterial LOS Legend

| <u>A</u> | <u>B</u> | <u>C</u> | <u>D</u> | <u>E</u> | <u>F</u> |
|------------|----------|----------|----------|-----------|----------|
| Very Light | Light | Moderate | Heavy | Congested | Severe |

SR 92/Highway 92 (Paulding County) - Evening



SR 92/Highway 92 (Paulding County) - Evening

A

Congestion Type: Mainline Queue

Location: Between SR 3 & SR 381

Frequency: Intermittent

Direction: Southbound

Queue Population: 20 to 40 vpl

Number of Lanes: 1

Note: Congestion appeared to be caused by school buses along this section of SR 92.

B

Congestion Type: Cross Road Signal Queue

Location: E. Paulding Dr

Frequency: Intermittent

Direction: Westbound

Queue Population: 20 to 30 vpl

Number of Lanes: 1

C

Congestion Type: Mainline Signal Queue

Location: E. Paulding Dr

Frequency: Intermittent

Direction: Northbound

Queue Population: 20 to 30 vpl

Number of Lanes: 1

D

Congestion Type: Mainline Signal Queue

Location: SR 120

Frequency: Intermittent

Direction: Northbound

Queue Population: 20 to 30 vpl

Number of Lanes: 1

E

Congestion Type: Mainline Signal Queue

Location: SR 6

Frequency: Peak Hour

Direction: Southbound

Queue Population: 20 to 50 vpl

Number of Lanes: 1

F

Congestion Type: Cross Road Signal Queue

Location: Oak St

Frequency: Intermittent

Direction: Westbound

Queue Population: 20 to 30 vpl

Number of Lanes: 1

G

Congestion Type: Mainline Signal Queue

Location: Brownsville Rd

Frequency: Intermittent

Direction: Northbound

Queue Population: 20 to 25 vpl

Number of Lanes: 1

SA

Congestion Type: Surveyed Cross Road Signal Queue

Location: SR 120

Frequency: Intermittent

Direction: Westbound

Queue Population: 20 to 25 vpl

Number of Lanes: 2

SB

Congestion Type: Surveyed Cross Road Signal Queue

Location: SR 360

Frequency: Most observations

Direction: Westbound

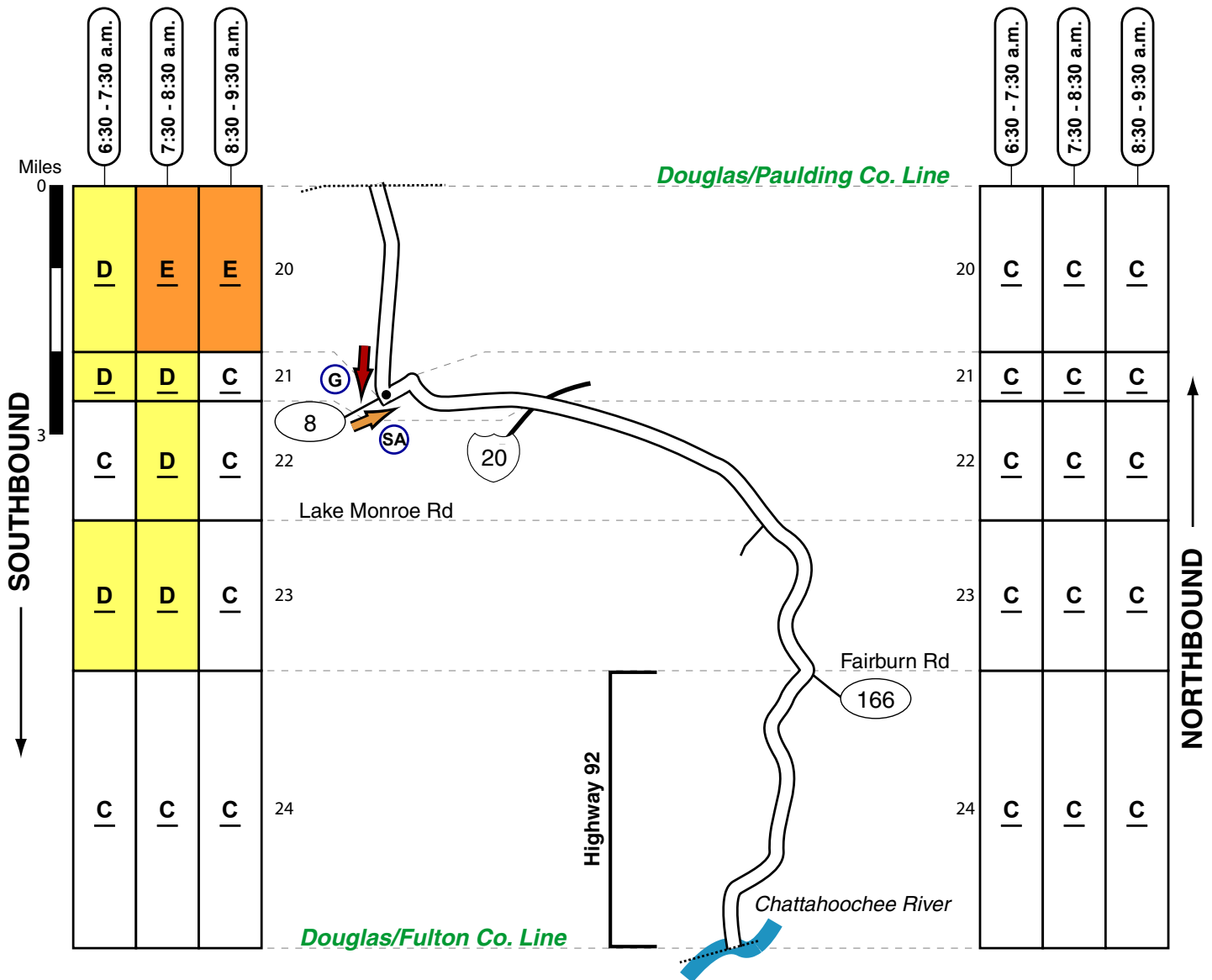
Queue Population: 20 to 50 vpl

Number of Lanes: 1

Arterial LOS Legend

| A | B | C | D | E | F |
|------------|-------|----------|-------|-----------|--------|
| Very Light | Light | Moderate | Heavy | Congested | Severe |

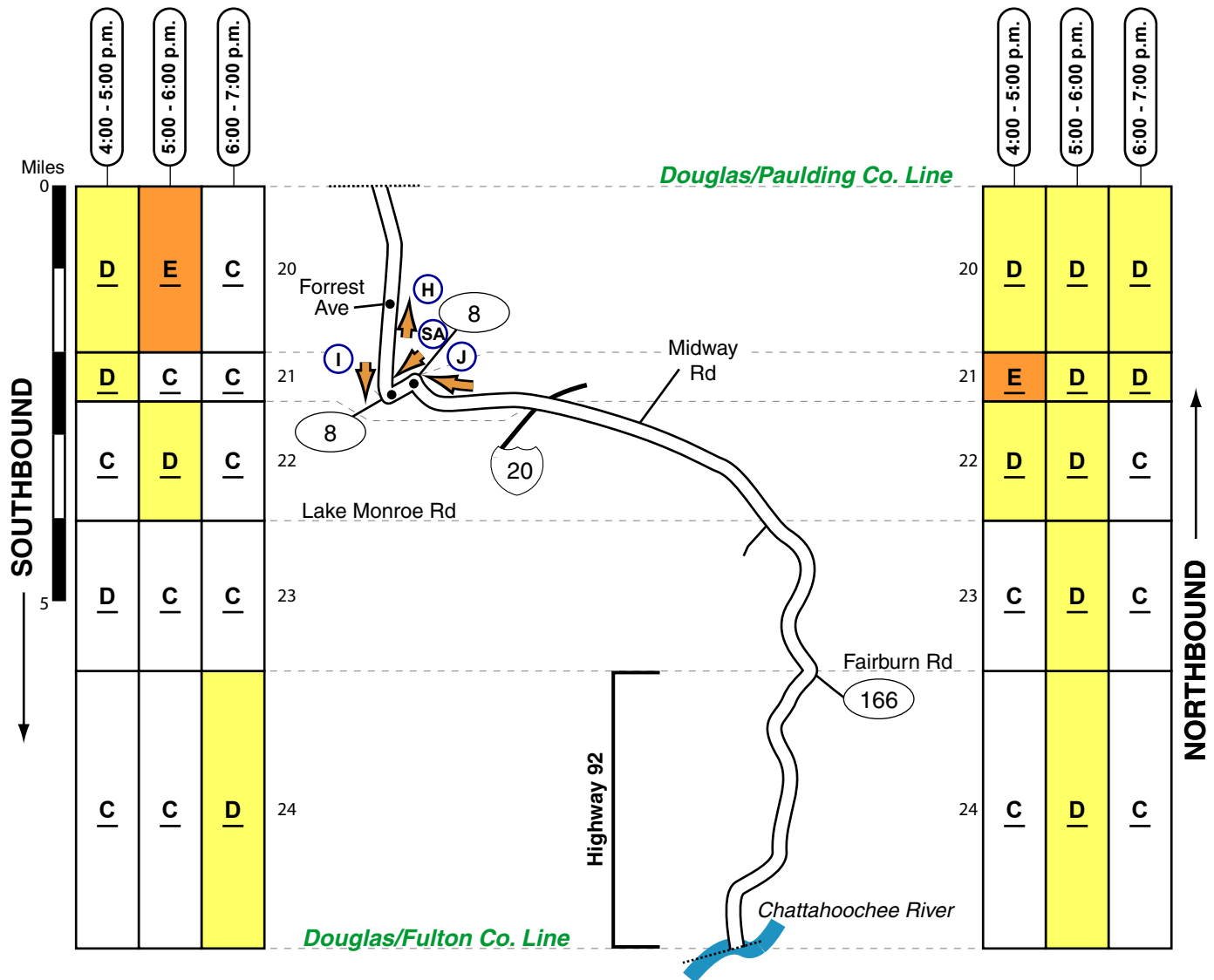
SR 92/Highway 92 (Douglas County) - Morning



G
 Congestion Type: Mainline Signal Queue
 Location: SR 8
 Frequency: Peak Hour
 Direction: Southbound
 Queue Population: 20 to 50 vpl
 Number of Lanes: 1
 Note: During some observations, congestion extended back through the upstream signal at Forrest Ave.

SA
 Congestion Type: Surveyed Cross Road Signal Queue
 Location: SR 8
 Frequency: One Time Only
 Direction: Eastbound
 Queue Population: 25 to 30 vpl
 Number of Lanes: 1

SR 92/Highway 92 (Douglas County) - Evening



H
Congestion Type: Mainline Signal Queue
Location: Forrest Ave
Frequency: Intermittent
Direction: Northbound
Queue Population: 20 to 25 vpl
Number of Lanes: 1

I
Congestion Type: Mainline Signal Queue
Location: SR 8
Frequency: Intermittent
Direction: Southbound
Queue Population: 20 to 30 vpl
Number of Lanes: 1

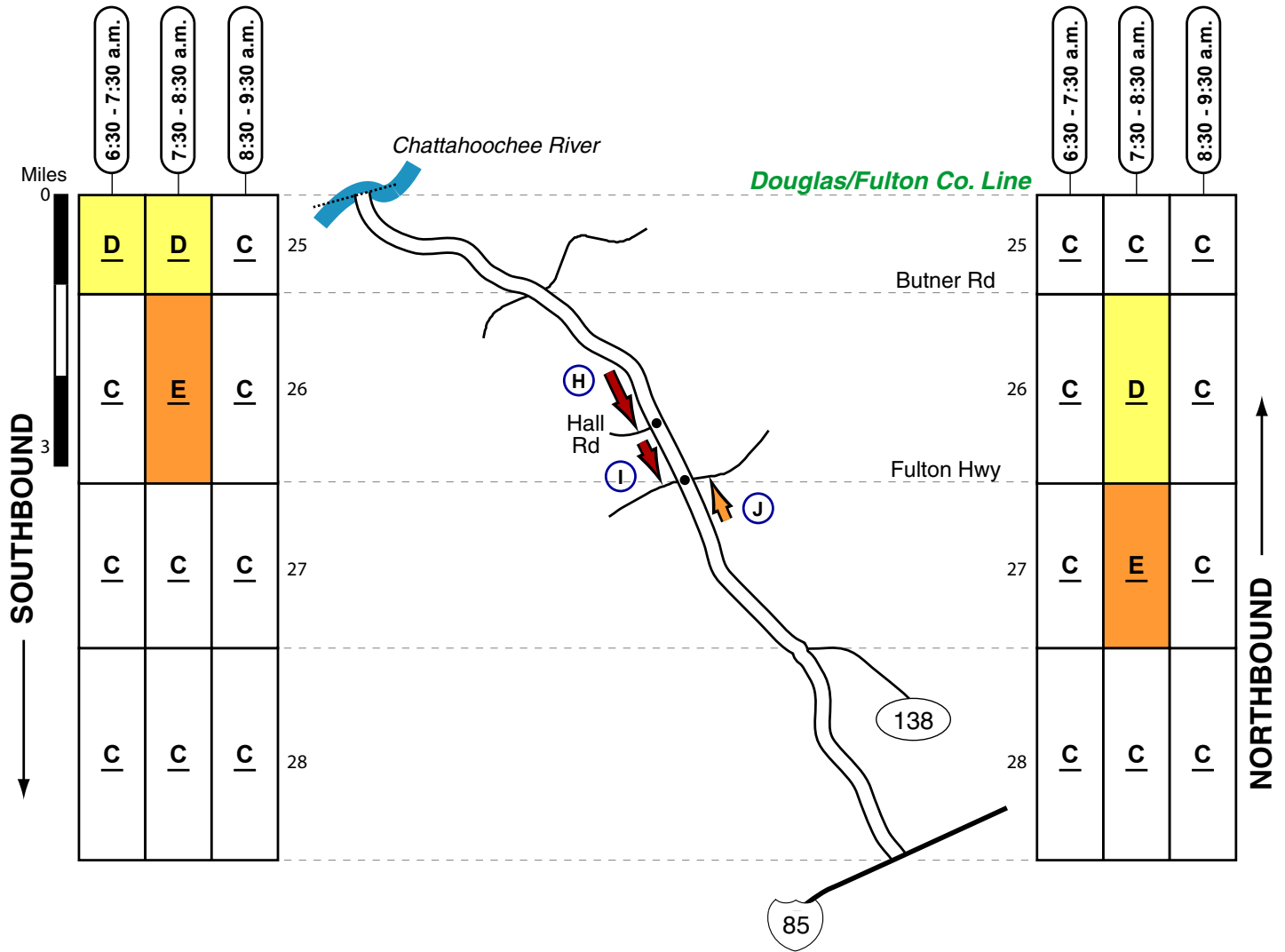
J
Congestion Type: Mainline Signal Queue/Platoons
Location: SR 8
Frequency: Intermittent
Direction: Northbound
Queue Population: 20 to 30 vpl
Number of Lanes: 1

SA
Congestion Type: Surveyed Cross Road Signal Queue
Location: SR 8
Frequency: Intermittent
Direction: Westbound
Queue Population: 20 to 25 vpl
Number of Lanes: 1

Arterial LOS Legend

| A | B | C | D | E | F |
|------------|-------|----------|-------|-----------|--------|
| Very Light | Light | Moderate | Heavy | Congested | Severe |

SR 92 (Fulton County) - Morning



H
 Congestion Type: Mainline Signal Queue
 Location: Hall Rd
 Frequency: Peak Hour
 Direction: Southbound
 Queue Population: 20 to 40 vpl
 Number of Lanes: 1
 Note: During one observation, over 100 vehicles were queued at the signal.

J
 Congestion Type: Mainline Signal Queue
 Location: Fulton Hwy
 Frequency: Intermittent
 Direction: Northbound
 Queue Population: 20 to 25 vpl
 Number of Lanes: 1

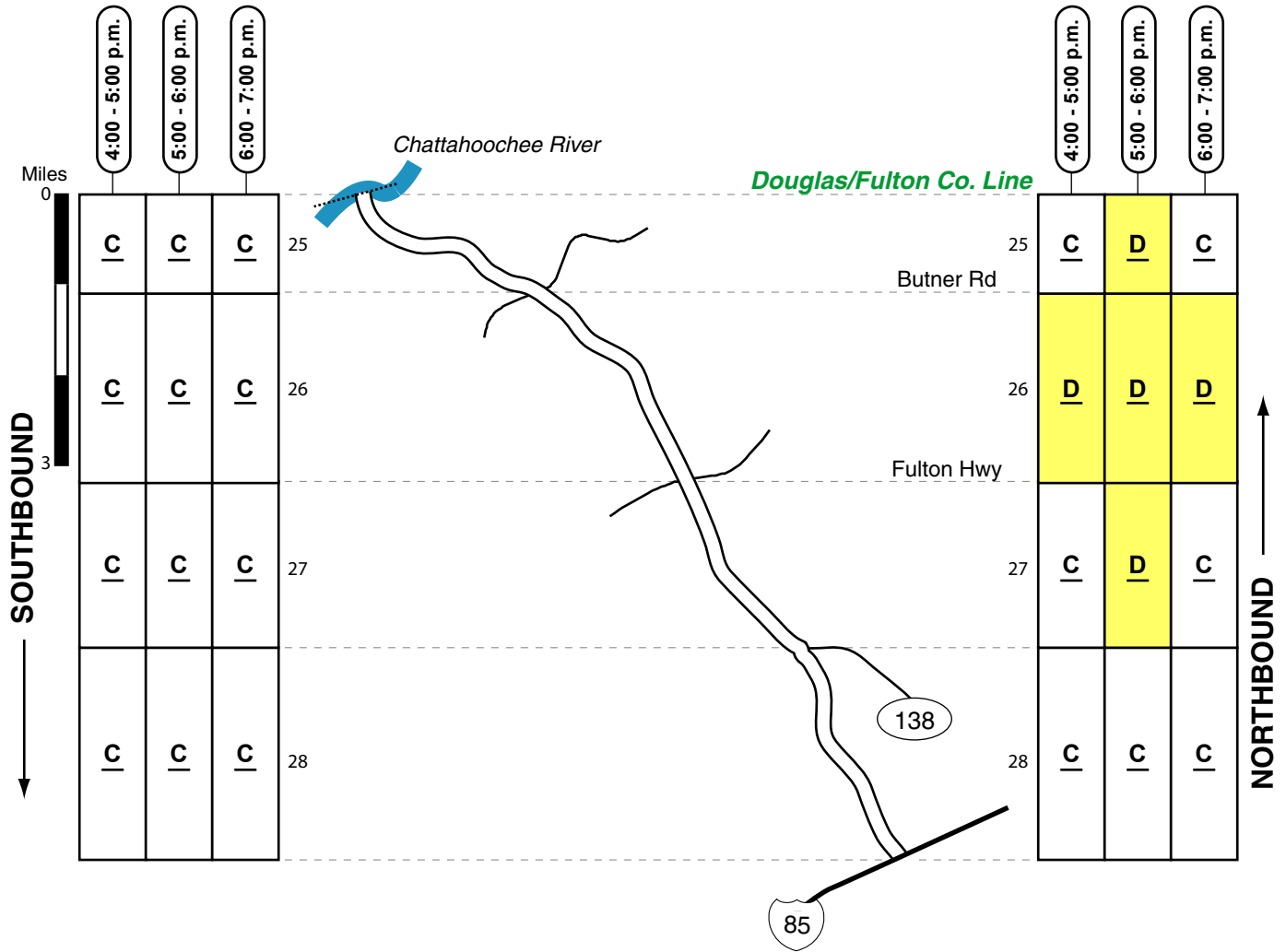
I
 Congestion Type: Left-Turn Queue
 Location: Fulton Hwy
 Frequency: Peak Hour
 Direction: Southbound
 Queue Population: 20 to 30 vpl
 Number of Lanes: 1
 Note: When congested, vehicles were queued in the dedicated left turn lane; congestion typically extended back into the median on SR 92 (yellow hashed striping).

Arterial LOS Legend

| A | B | C | D | E | F |
|------------|-------|----------|-------|-----------|--------|
| Very Light | Light | Moderate | Heavy | Congested | Severe |

Spring 2010

SR 92 (Fulton County) - Evening

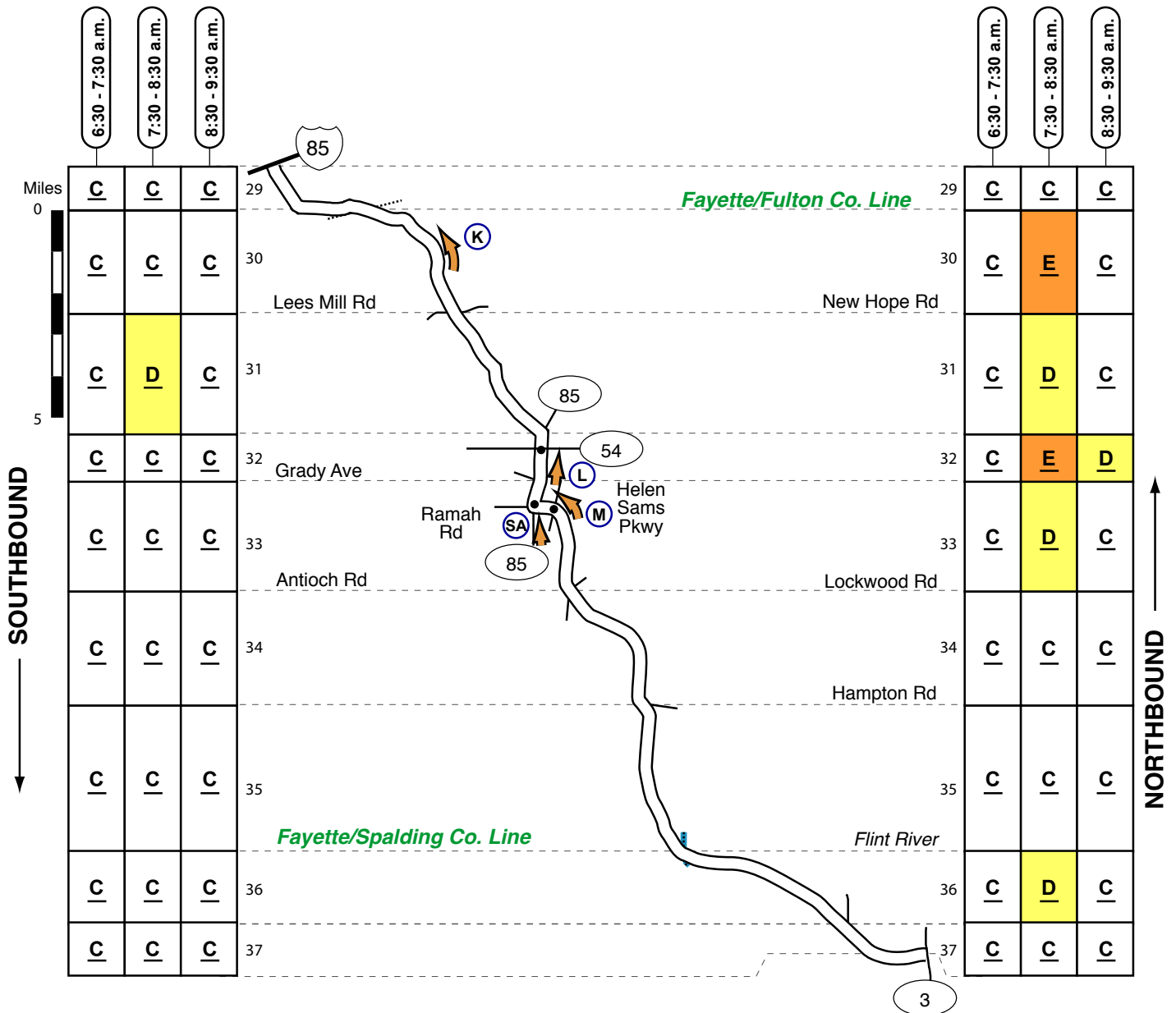


Arterial LOS Legend

| | | | | | |
|------------|----------|----------|----------|-----------|----------|
| A | B | C | D | E | F |
| Very Light | Light | Moderate | Heavy | Congested | Severe |

Spring 2010

SR 92 (Fayette County) - Morning



K
 Congestion Type: Platoons
 Location: Between New Hope Rd & Fayette/Fulton Co. Line
 Frequency: Intermittent
 Direction: Northbound
 Platoon Population: 25 to 30 vpl
 Number of Lanes: 1

L
 Congestion Type: Mainline Signal Queue
 Location: SR 54
 Frequency: Intermittent
 Direction: Northbound
 Queue Population: 20 to 25 vpl
 Number of Lanes: 2

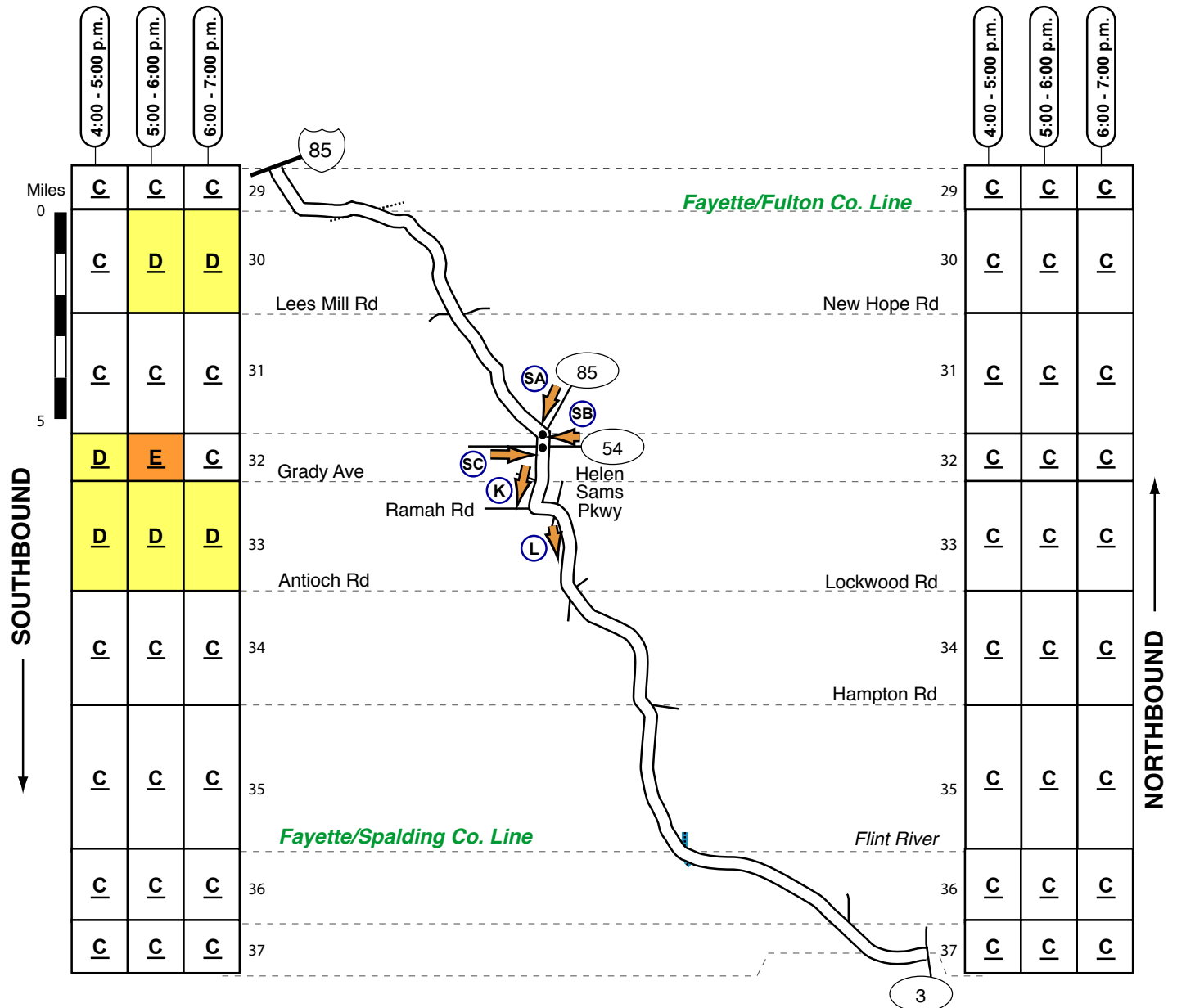
M
 Congestion Type: Queue / Platoons
 Location: Helen Sams Pkwy
 Frequency: Intermittent
 Direction: Northbound
 Queue Population: 20 to 40 vpl
 Number of Lanes: 1

SA
 Congestion Type: Surveyed Cross Road Signal Queue
 Location: SR 85
 Frequency: Intermittent
 Direction: Northbound
 Queue Population: 20 to 25 vpl
 Number of Lanes: 1

Arterial LOS Legend

| A | B | C | D | E | F |
|------------|-------|----------|-------|-----------|--------|
| Very Light | Light | Moderate | Heavy | Congested | Severe |

SR 92 (Fayette County) - Evening



Arterial LOS Legend

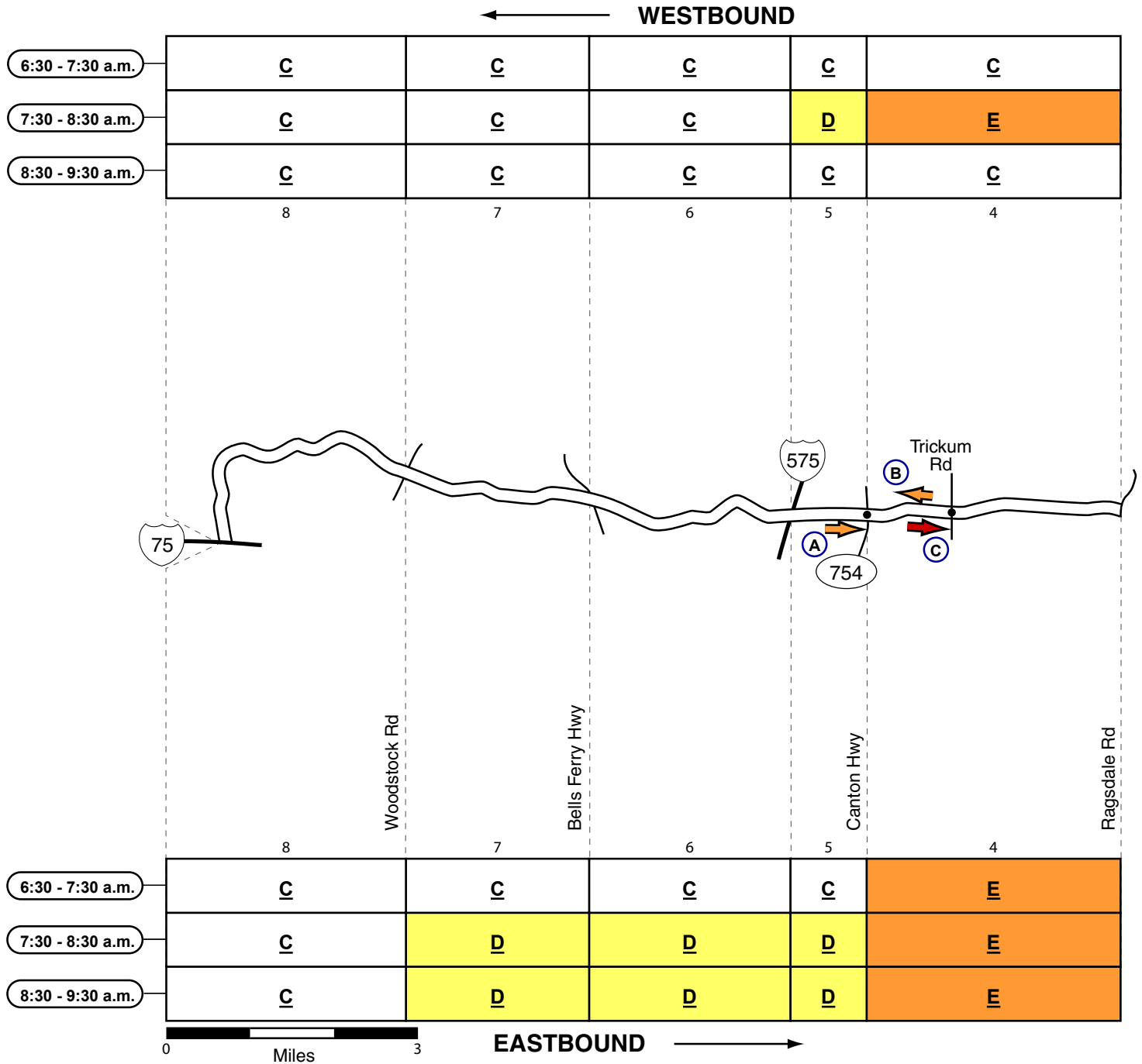
| A | B | C | D | E | F |
|------------|-------|----------|-------|-----------|--------|
| Very Light | Light | Moderate | Heavy | Congested | Severe |

(Blank)

Spring 2010

SR 92 (Cherokee County) -Morning

PERFORMANCE RATINGS | 215



A
 Congestion Type: Mainline Signal Queue
 Location: SR 754 (Canton Rd)
 Frequency: Intermittent
 Direction: Eastbound
 Queue Population: 20 to 30 vpl
 Number of Lanes: 3

B
 Congestion Type: Platoons
 Location: Between Ragsdale Rd and SR 754
 Frequency: Intermittent
 Direction: Westbound
 Platoon Population: 25 to 30 vpl
 Number of Lanes: 2

C
 Congestion Type: Mainline Signal Queue
 Location: Trickum Rd
 Frequency: Most Observations
 Direction: Eastbound
 Queue Population: 20 to 50 vpl
 Number of Lanes: 2

Arterial LOS Legend

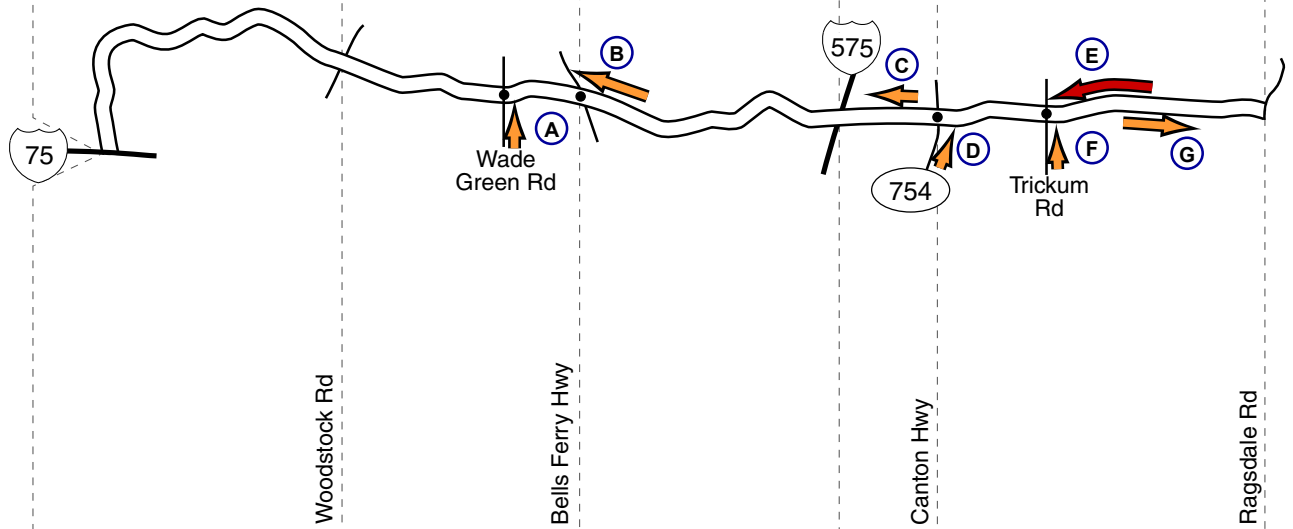
| A | B | C | D | E | F |
|------------|-------|----------|-------|-----------|--------|
| Very Light | Light | Moderate | Heavy | Congested | Severe |

Spring 2010

SR 92 (Cherokee County) -Evening

← WESTBOUND

| | | | | | |
|------------------|----------|----------|----------|----------|----------|
| 4:00 - 5:00 p.m. | <u>C</u> | <u>D</u> | <u>D</u> | <u>D</u> | <u>E</u> |
| 5:00 - 6:00 p.m. | <u>D</u> | <u>D</u> | <u>E</u> | <u>E</u> | <u>F</u> |
| 6:00 - 7:00 p.m. | <u>C</u> | <u>D</u> | <u>D</u> | <u>D</u> | <u>F</u> |
| | 8 | 7 | 6 | 5 | 4 |



| | | | | | |
|------------------|----------|----------|----------|----------|----------|
| 4:00 - 5:00 p.m. | <u>C</u> | <u>D</u> | <u>D</u> | <u>C</u> | <u>D</u> |
| 5:00 - 6:00 p.m. | <u>C</u> | <u>D</u> | <u>D</u> | <u>D</u> | <u>E</u> |
| 6:00 - 7:00 p.m. | <u>C</u> | <u>D</u> | <u>D</u> | <u>C</u> | <u>E</u> |
| | 8 | 7 | 6 | 5 | 4 |

0 Miles 3 → EASTBOUND

Arterial LOS Legend

| | | | | | |
|------------|----------|----------|----------|-----------|----------|
| <u>A</u> | <u>B</u> | <u>C</u> | <u>D</u> | <u>E</u> | <u>F</u> |
| Very Light | Light | Moderate | Heavy | Congested | Severe |

SR 92 (Cherokee County) -Evening

A

Congestion Type: Cross Road Signal Queue

Location: Wade Green Rd

Frequency: Intermittent

Direction: Northbound

Queue Population: 20 to 30 vpl

Number of Lanes: 1

Note: When congested, the head of the queue was found in the dedicated right-turn lane at the signal.

B

Congestion Type: Mainline Signal Queue

Location: Bells Ferry Rd

Frequency: Intermittent

Direction: Westbound

Queue Population: 20 to 30 vpl

Number of Lanes: 2

Note: During one observation, approximately 50 vehicles per lane were queued at the signal.

C

Congestion Type: Platoons

Location: Between SR 754 & I-575

Frequency: Peak Hour

Direction: Westbound

Platoon Population: 25 to 30 vpl

Number of Lanes: 3

D

Congestion Type: Cross Road Signal Queue

Location: SR 754 (Canton Rd)

Frequency: Intermittent

Direction: Northbound

Queue Population: 20 to 25 vpl

Number of Lanes: 2

Note: When congested, the head of the queue was found in the two dedicated left-turn lanes at the signal.

E

Congestion Type: Mainline Signal Queue

Location: Trickum Rd

Frequency: Most Observations

Direction: Westbound

Queue Population: 20 to 80 vpl

Number of Lanes: 2

Note: During the peak hour, westbound congestion approaching Trickum Rd typically extended back through the upstream signal at the entrance to Walmart.

F

Congestion Type: Cross Road Signal Queue

Location: Trickum Rd

Frequency: Intermittent

Direction: Northbound

Queue Population: 20 to 45 vpl

Number of Lanes: 1

Note: When congested, the head of the queue at the signal was sometimes found in the thru-lane and other times in the dedicated left-turn lane.

G

Congestion Type: Platoons

Location: Between SR 754 (Canton Rd) & Ragsdale Rd

Frequency: Intermittent

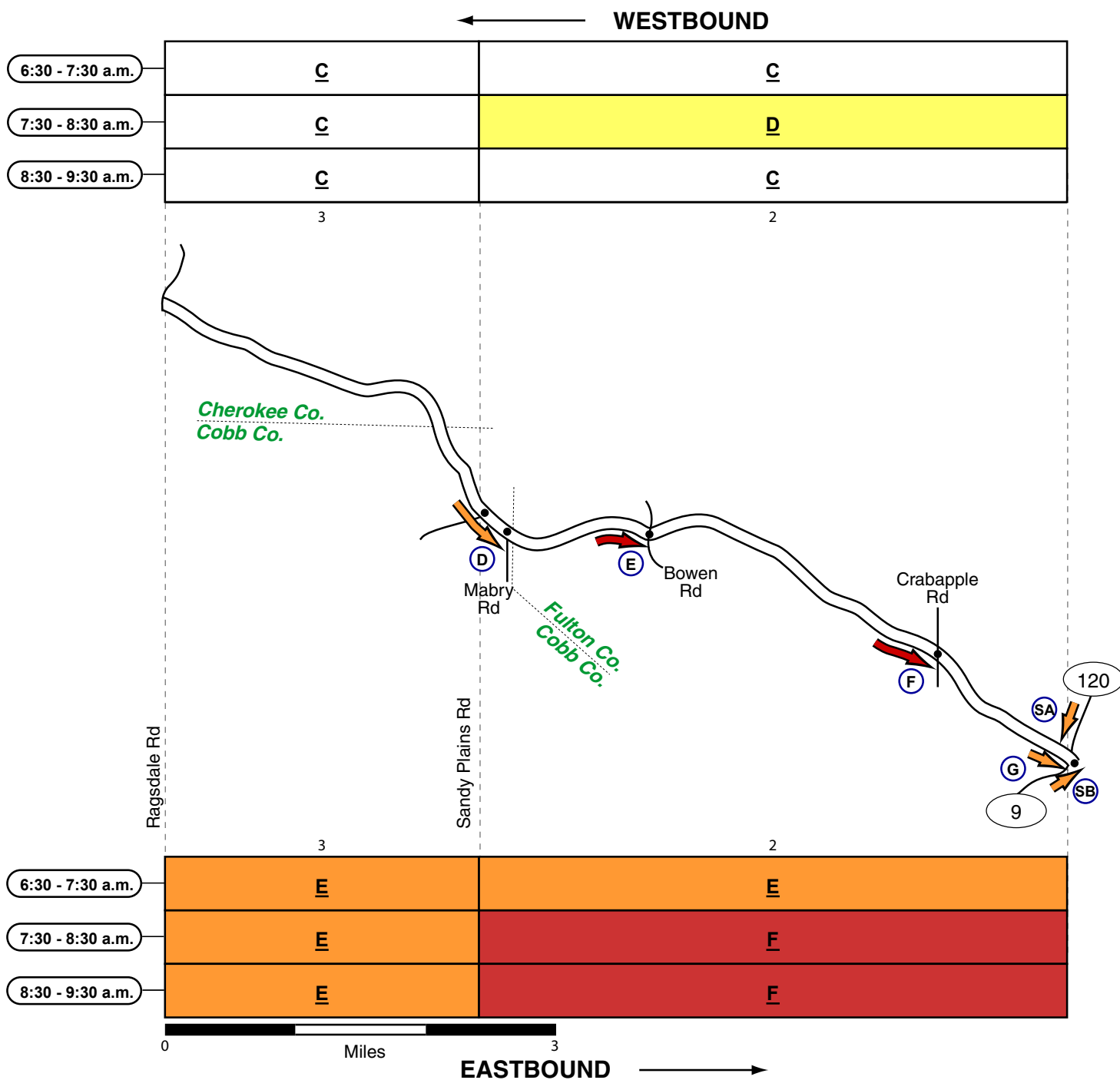
Direction: Eastbound

Queue Population: 25 to 35 vpl

Number of Lanes: 2

Spring 2010

SR 92 (Cherokee/Cobb & Fulton Counties) -Morning



Arterial LOS Legend

| A | B | C | D | E | F |
|------------|-------|----------|-------|-----------|--------|
| Very Light | Light | Moderate | Heavy | Congested | Severe |

SR 92 (Cherokee/Cobb & Fulton Counties) -Morning

D

Congestion Type: Mainline Signal Queue
Location: Sandy Plains Rd & Mabry Rd
Frequency: Intermittent
Direction: Eastbound
Queue Population: 20 to 35 vpl
Number of Lanes: 3

E

Congestion Type: Mainline Signal Queue
Location: Bowen Rd
Frequency: Peak Hour
Direction: Eastbound
Queue Population: 20 to 50 vpl
Number of Lanes: 3

F

Congestion Type: Mainline Signal Queue
Location: Crabapple Rd
Frequency: Peak Hour
Direction: Eastbound
Queue Population: 20 to 45 vpl
Number of Lanes: 3

G

Congestion Type: Mainline Signal Queue
Location: SR 120 / SR 9
Frequency: Intermittent
Direction: Eastbound
Queue Population: 20 to 30 vpl
Number of Lanes: 3

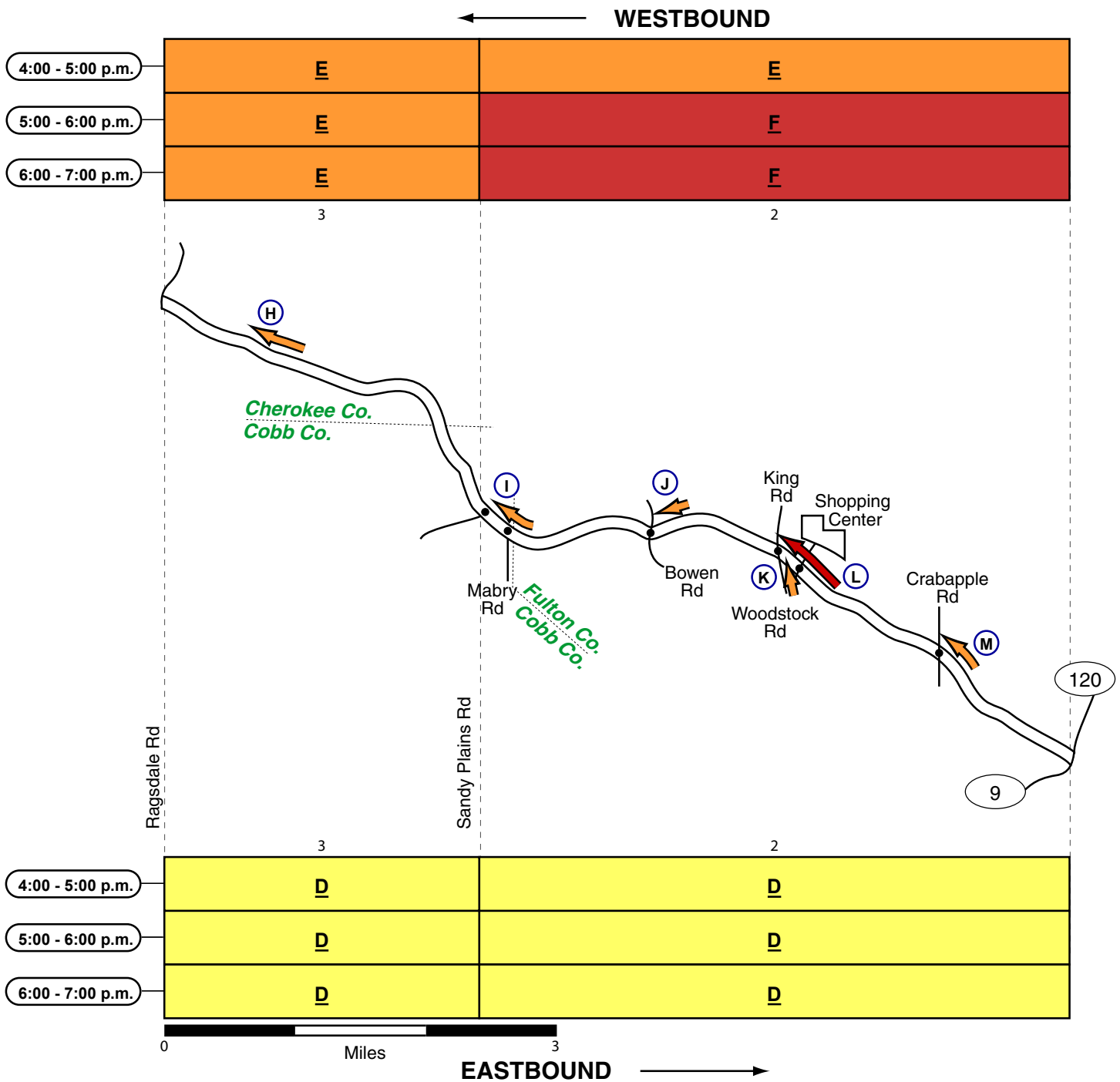
SA

Congestion Type: Surveyed Cross Road Signal Queue
Location: SR 120
Frequency: Intermittent
Direction: Southbound
Queue Population: 20 to 25 vpl
Number of Lanes: 2

SB

Congestion Type: Surveyed Cross Road Signal Queue
Location: SR 9
Frequency: Intermittent
Direction: Northbound
Queue Population: 20 to 25 vpl
Number of Lanes: 2

SR 92 (Cherokee/Cobb & Fulton Counties) -Evening



Arterial LOS Legend

| A | B | C | D | E | F |
|------------|-------|----------|-------|-----------|--------|
| Very Light | Light | Moderate | Heavy | Congested | Severe |

SR 92 (Cherokee/Cobb & Fulton Counties) -Evening

H

Congestion Type: Platoons

Location: Between Sandy Plains Rd & Ragsdale Rd

Frequency: Most Observations

Direction: Westbound

Queue Population: 25 to 35 vpl

Number of Lanes: 2

I

Congestion Type: Mainline Signal Queue

Location: Mabry Rd & Sandy Plains Rd

Frequency: Intermittent

Direction: Westbound

Queue Population: 20 to 30 vpl

Number of Lanes: 2

J

Congestion Type: Mainline Signal Queue

Location: Bowen Rd

Frequency: Intermittent

Direction: Westbound

Queue Population: 20 to 25 vpl

Number of Lanes: 3

L

Congestion Type: Mainline Signal Queue

Location: King Rd/Woodstock Rd

Frequency: Most Observations (after 5:00 p.m.)

Direction: Westbound

Queue Population: 20 to 120 vpl

Number of Lanes: 3

K

Congestion Type: Cross Road Signal Queue

Location: Woodstock Rd

Frequency: Intermittent

Direction: Northbound

Queue Population: 20 to 40 vpl

Number of Lanes: 1

M

Congestion Type: Mainline Signal Queue

Location: Crabapple Rd

Frequency: Intermittent

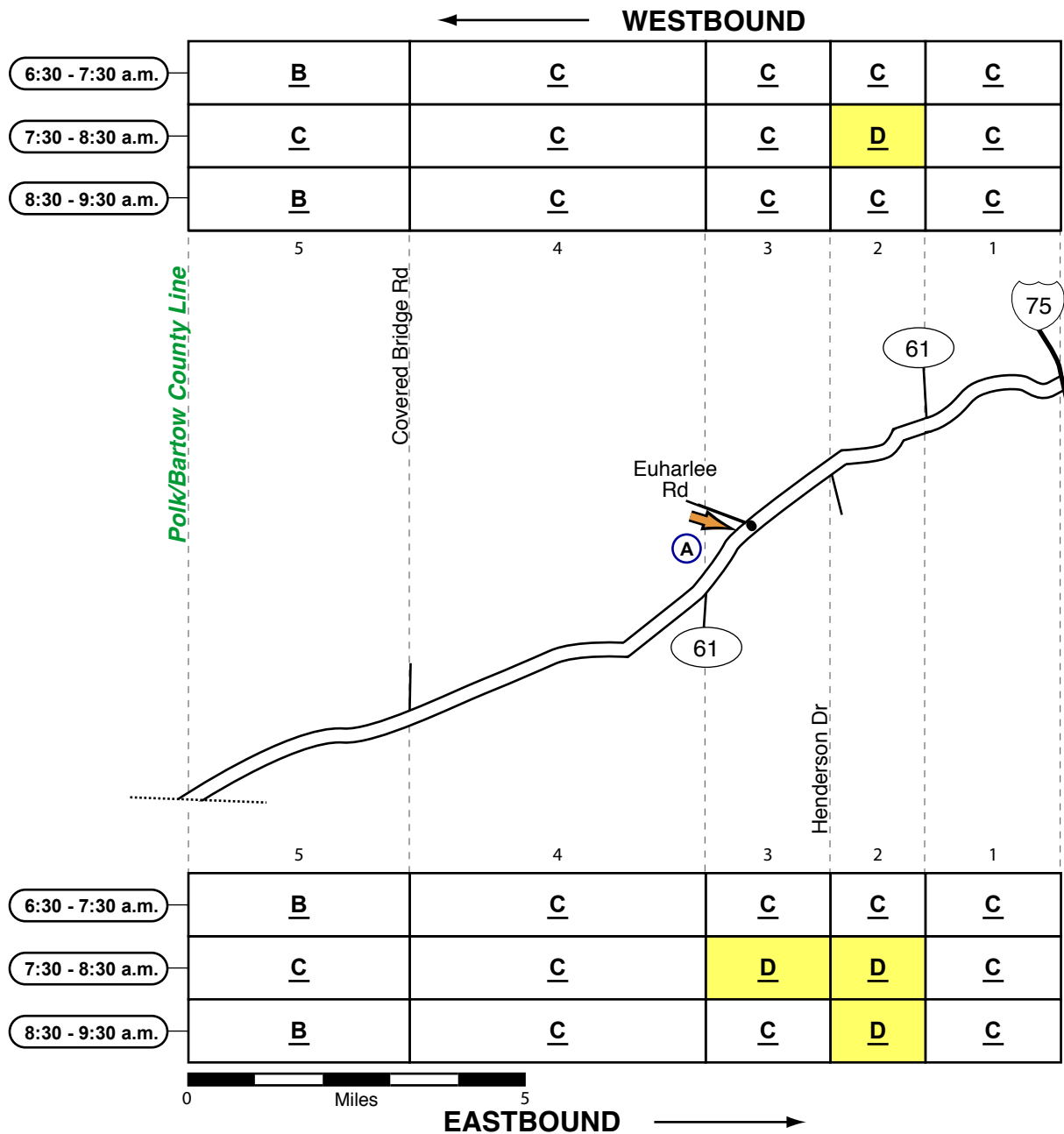
Direction: Westbound

Queue Population: 20 to 25 vpl

Number of Lanes: 3

Spring 2010

SR 113 (Bartow County) - Morning



A

Congestion Type: Cross Road Signal Queue

Location: Euharlee Rd

Frequency: Intermittent

Direction: Southbound

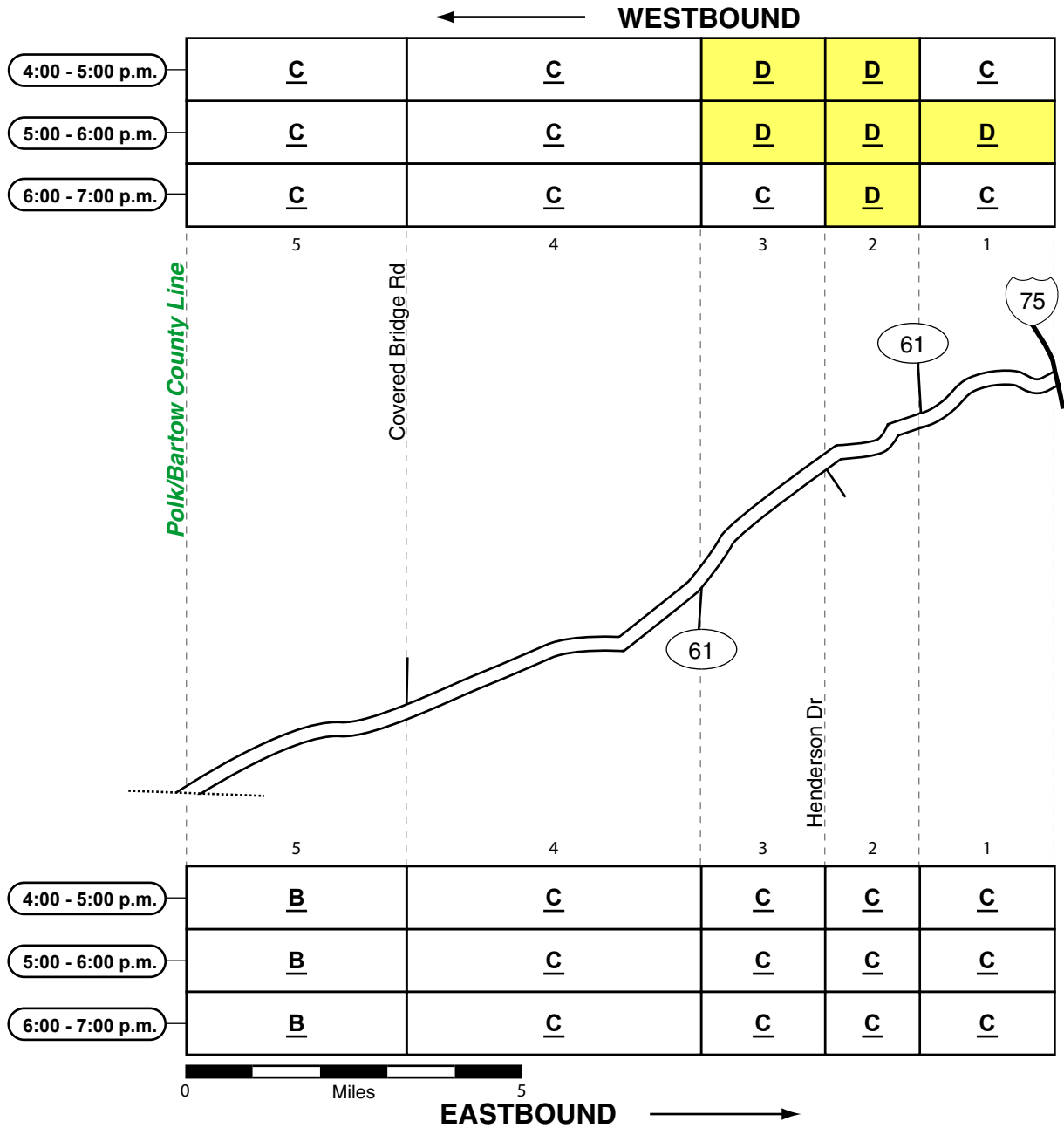
Queue Population: 20 to 35 vpl

Number of Lanes: 1

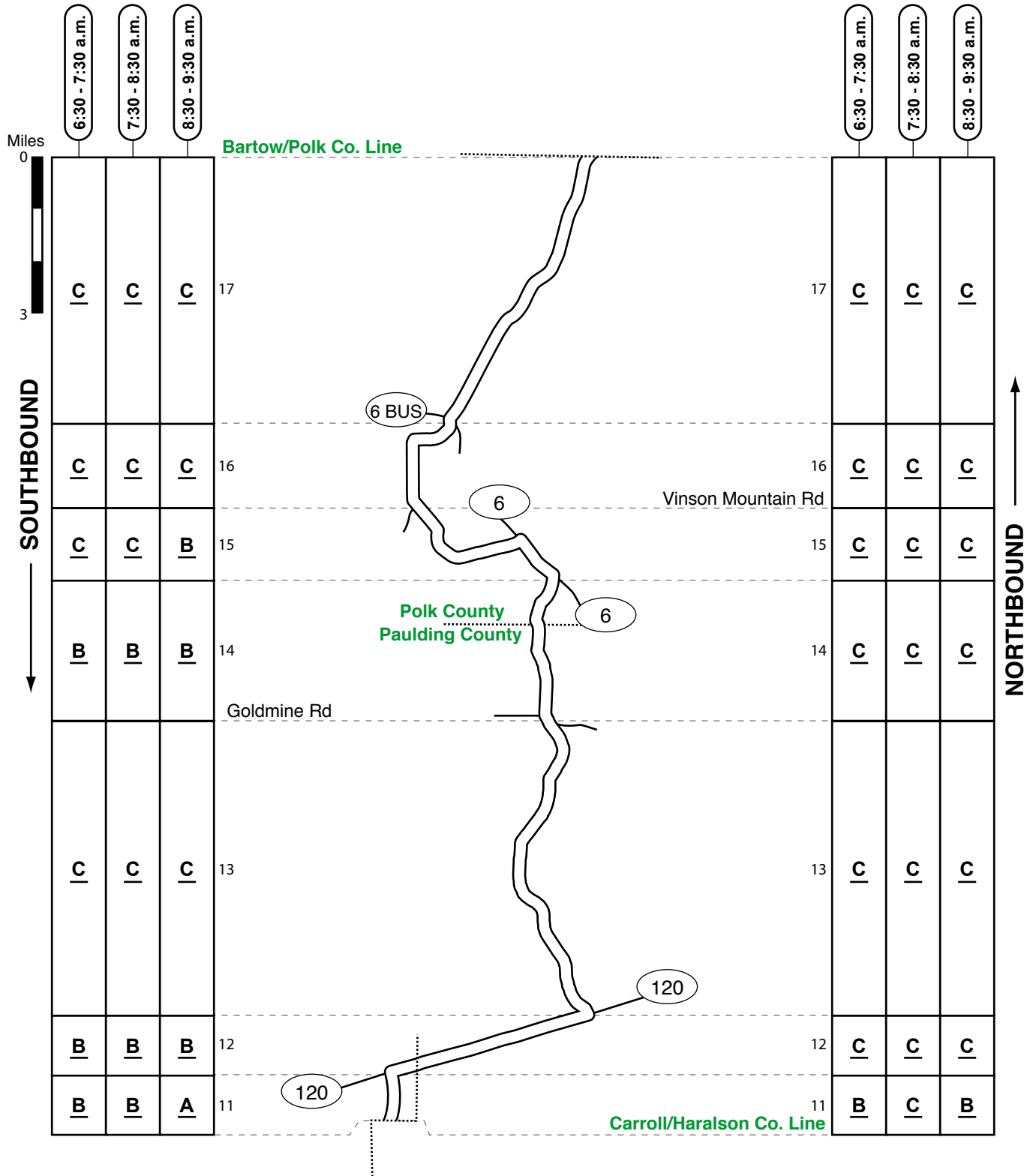
Arterial LOS Legend

| | | | | | |
|------------|----------|----------|----------|-----------|----------|
| <u>A</u> | <u>B</u> | <u>C</u> | <u>D</u> | <u>E</u> | <u>F</u> |
| Very Light | Light | Moderate | Heavy | Congested | Severe |

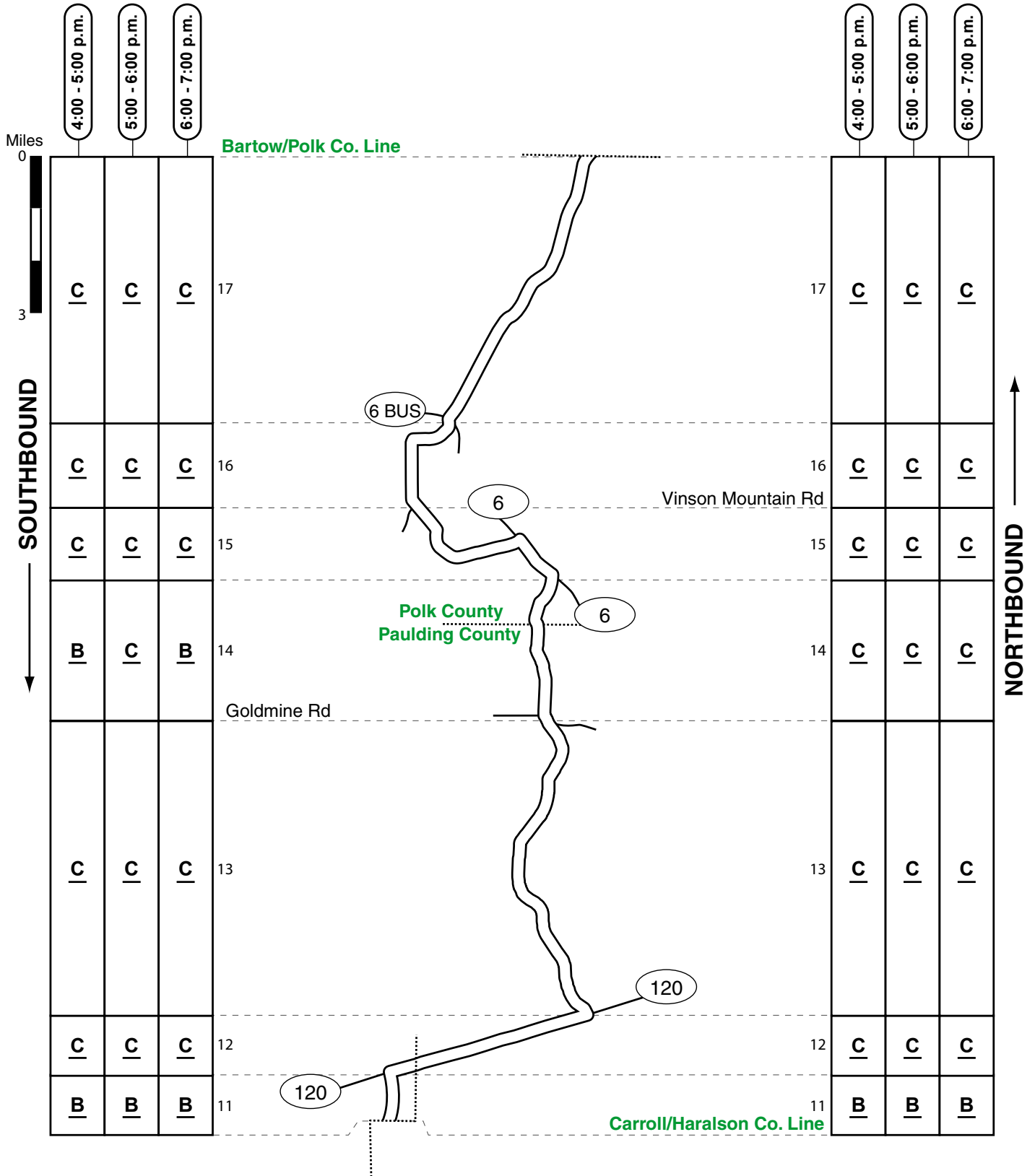
SR 113 (Bartow County) - Evening



SR 113 (Polk & Paulding Counties) - Morning



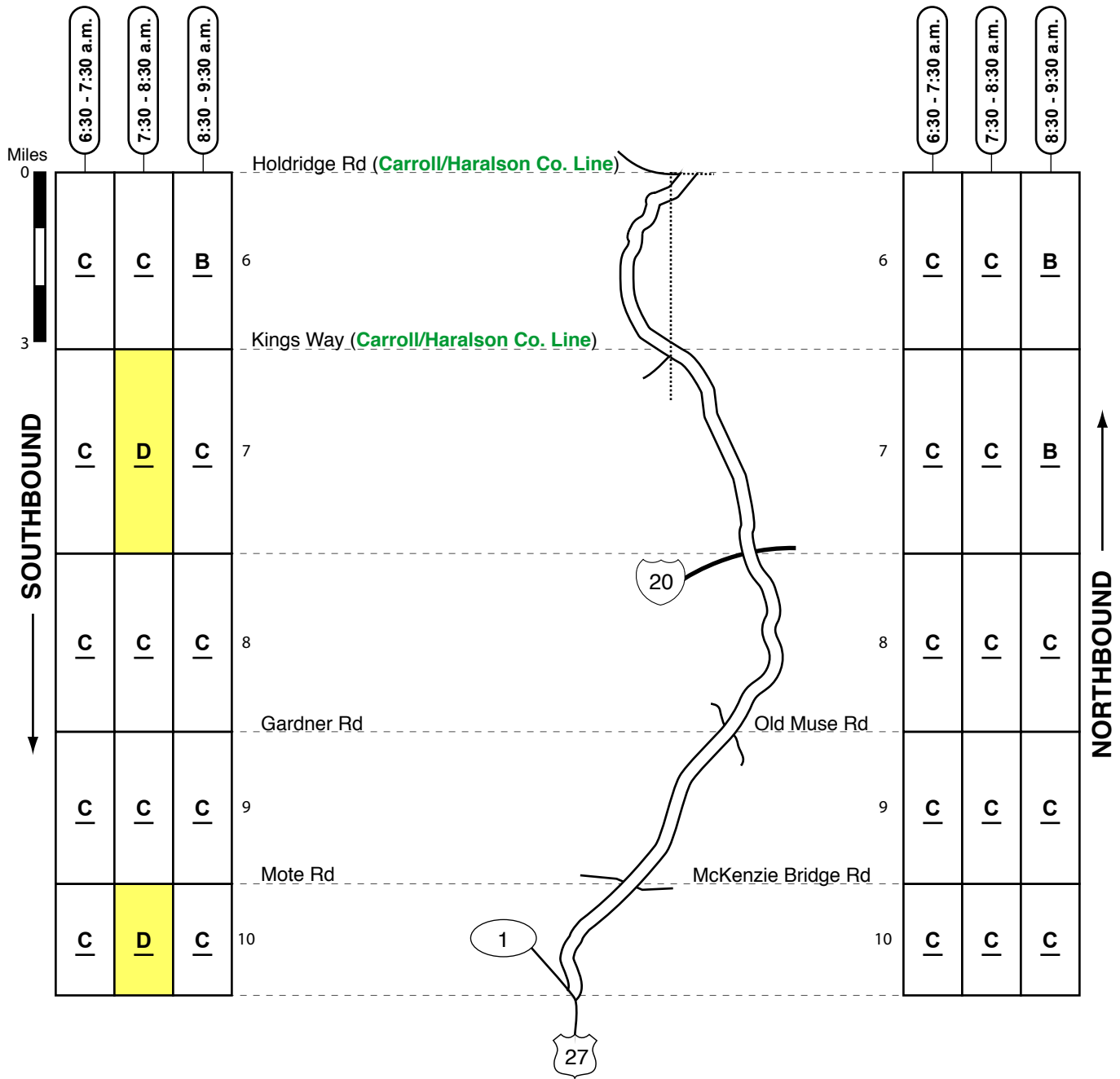
SR 113 (Polk & Paulding Counties) - Evening



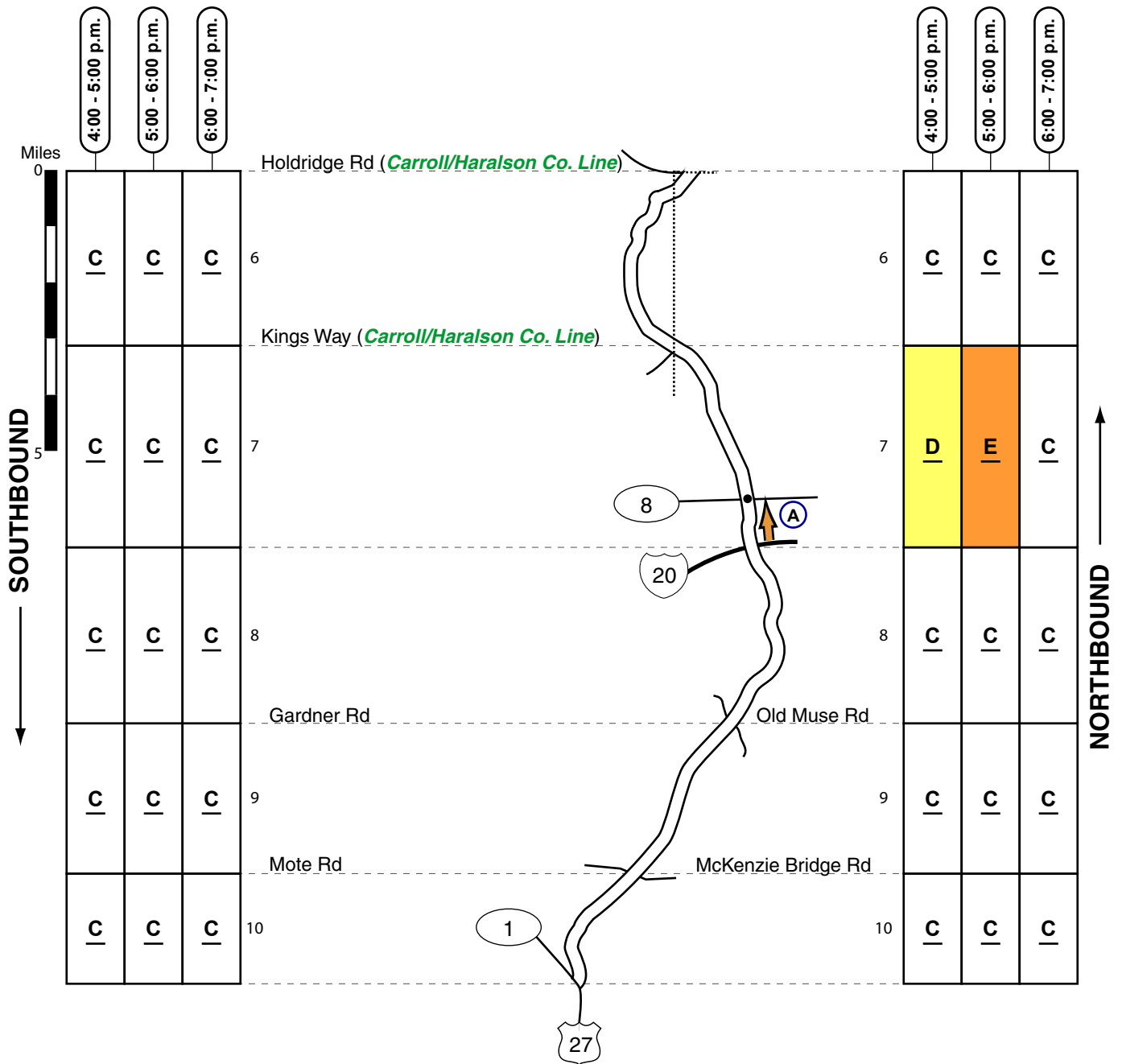
Arterial LOS Legend

| | | | | | |
|------------|----------|----------|----------|-----------|----------|
| A | B | C | D | E | F |
| Very Light | Light | Moderate | Heavy | Congested | Severe |

SR 113 (Carroll & Haralson Counties) - Morning



SR 113 (Carroll & Haralson Counties) - Evening



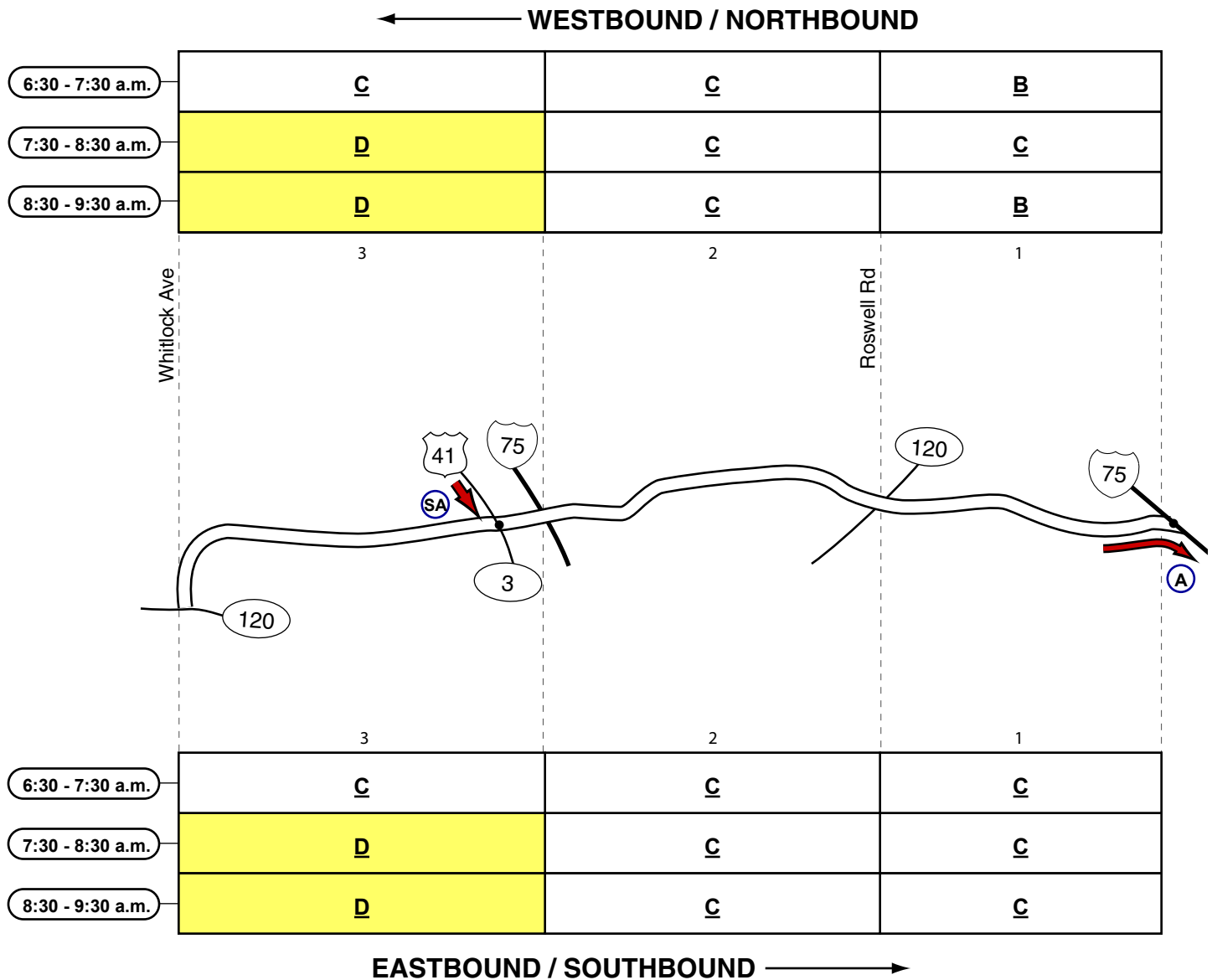
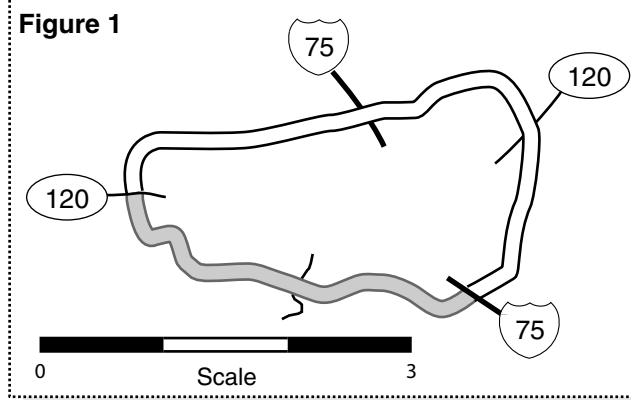
A
 Congestion Type: Mainline Signal Queue
 Location: SR 8
 Frequency: Intermittent
 Direction: Northbound
 Queue Population: 20 to 40 vpl
 Number of Lanes: 1

Arterial LOS Legend

| A | B | C | D | E | F |
|------------|-------|----------|-------|-----------|--------|
| Very Light | Light | Moderate | Heavy | Congested | Severe |

120 Loop / Marietta Parkway (Cobb County) - Morning

Graphic depicted below is not the actual shape of Marietta Pkwy. See Figure 1 for actual shape.

**Figure 1****Arterial LOS Legend**

| | | | | | |
|------------|----------|----------|----------|-----------|----------|
| <u>A</u> | <u>B</u> | <u>C</u> | <u>D</u> | <u>E</u> | <u>F</u> |
| Very Light | Light | Moderate | Heavy | Congested | Severe |

120 Loop / Marietta Parkway (Cobb County) - Morning

A

Congestion Type: Mainline Signal Queue

Location: I-75 (Exit 263)

Frequency: Peak Hour

Direction: Westbound

Queue Population: 20 to 40 vpl

Number of Lanes: 2

Note: When congested, vehicles queued in the two dedicated left turn lanes (to southbound I-75) sometimes extended back into the mainline of Marietta Pkwy.

SA

Congestion Type: Surveyed Cross Road Signal Queue

Location: SR 3/US 41

Frequency: Most Observations

Direction: Southbound

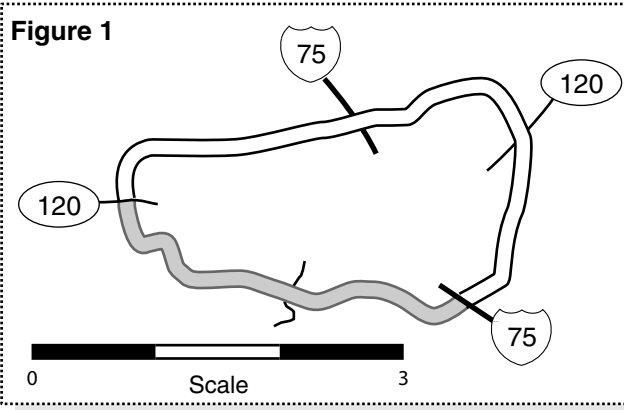
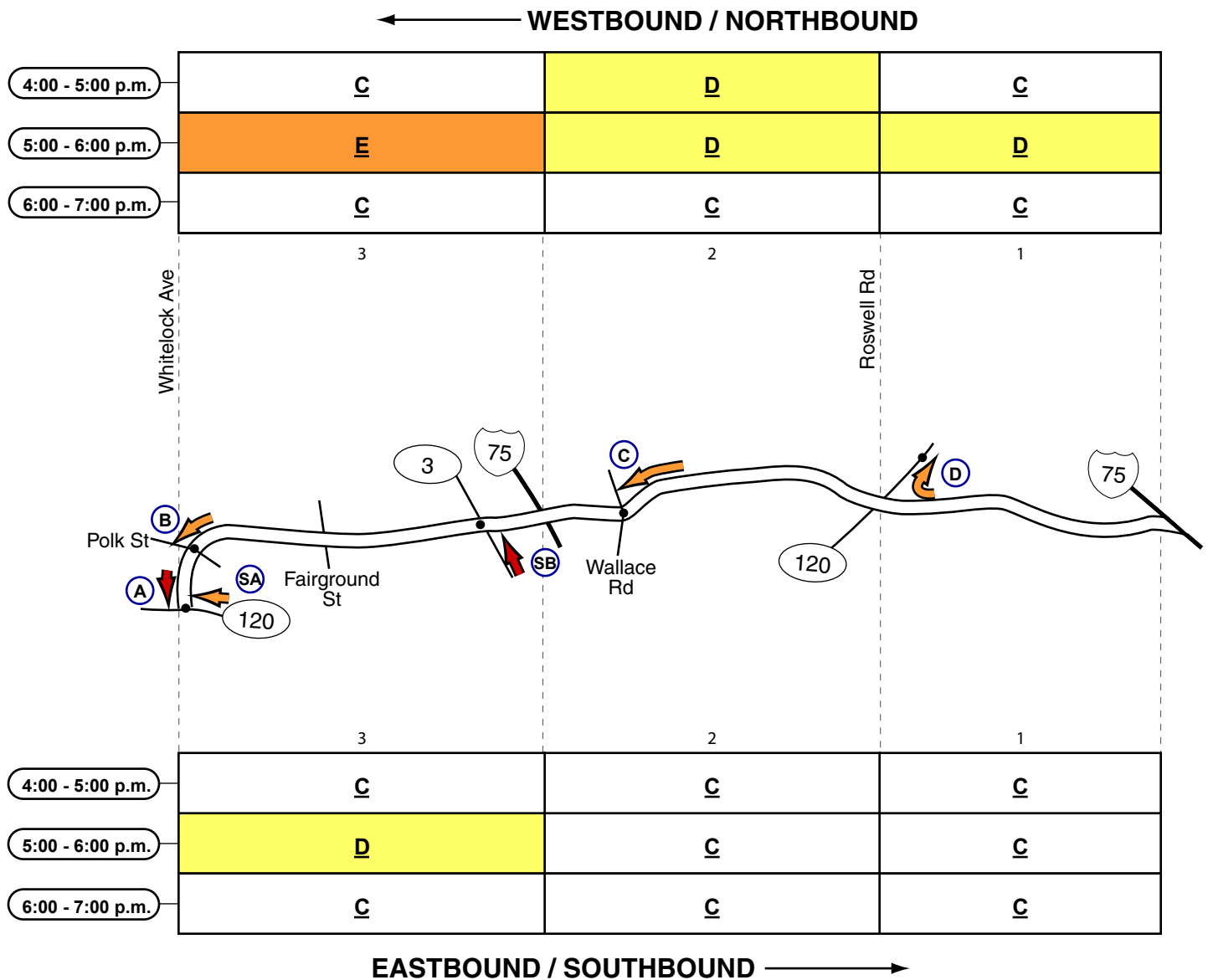
Queue Population: 20 to 40 vpl

Number of Lanes: 2

Arterial LOS Legend

| <u>A</u> | <u>B</u> | <u>C</u> | <u>D</u> | <u>E</u> | <u>F</u> |
|------------|----------|----------|----------|-----------|----------|
| Very Light | Light | Moderate | Heavy | Congested | Severe |

120 Loop / Marietta Parkway (Cobb County) - Evening



120 Loop / Marietta Parkway (Cobb County) - Evening

A

Congestion Type: Mainline Signal Queue

Location: SR 120 (Whitlock Ave)

Frequency: Peak Hour

Direction: Southbound

Queue Population: 20 to 30 vpl

Number of Lanes: 2

B

Congestion Type: Mainline Signal Queue

Location: Polk St

Frequency: Intermittent

Direction: Southbound

Queue Population: 20 to 30 vpl

Number of Lanes: 1

C

Congestion Type: Mainline Signal Queue

Location: Wallace Rd

Frequency: Intermittent

Direction: Westbound

Queue Population: 20 to 30 vpl

Number of Lanes: 1

D

Congestion Type: Exit Ramp Queue

Location: SR 120 (Roswell Rd)

Frequency: One Day Only

Direction: Northbound

Queue Population: 40 to 50 vpl

Number of Lanes: 2

SA

Congestion Type: Surveyed Cross Road Signal Queue

Location: SR 120

Frequency: Intermittent

Direction: Westbound

Queue Population: 20 to 25 vpl

Number of Lanes: 1

SB

Congestion Type: Surveyed Cross Road Signal Queue

Location: SR 3

Frequency: Most Observations

Direction: Northbound

Queue Population: 20 to 60 vpl

Number of Lanes: 2

120 Loop / Marietta Parkway (Cobb County) - Morning

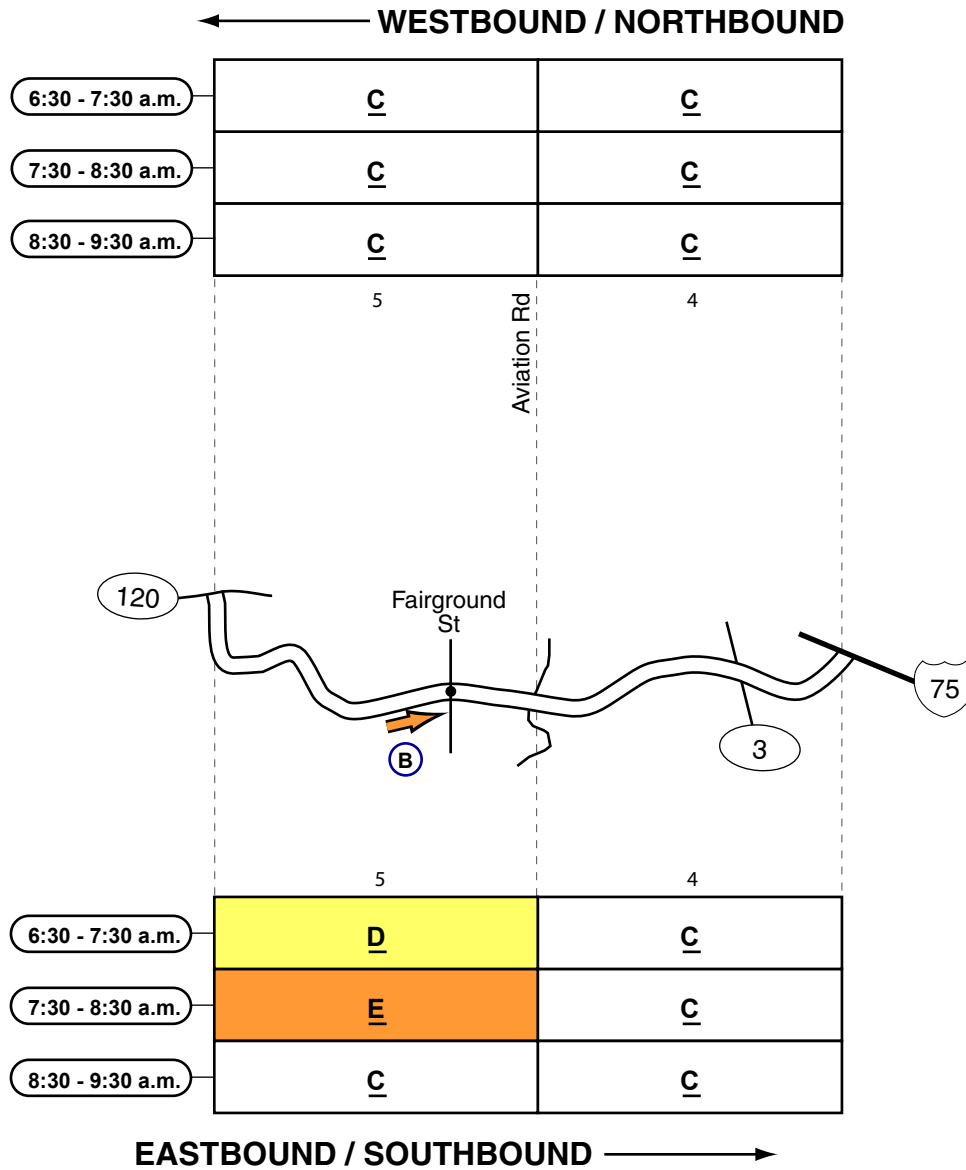
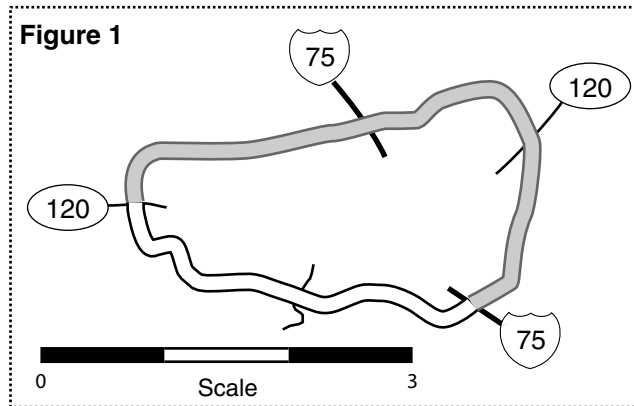


Figure 1

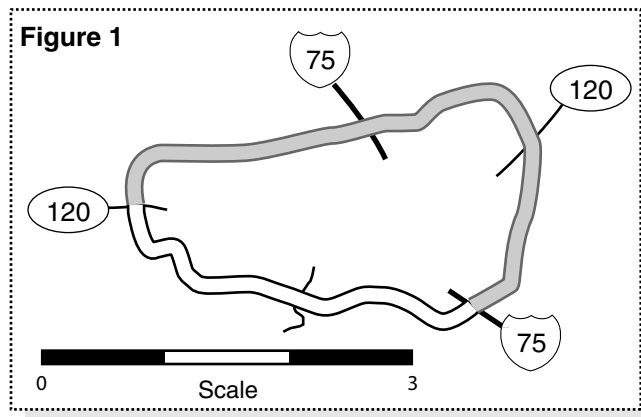
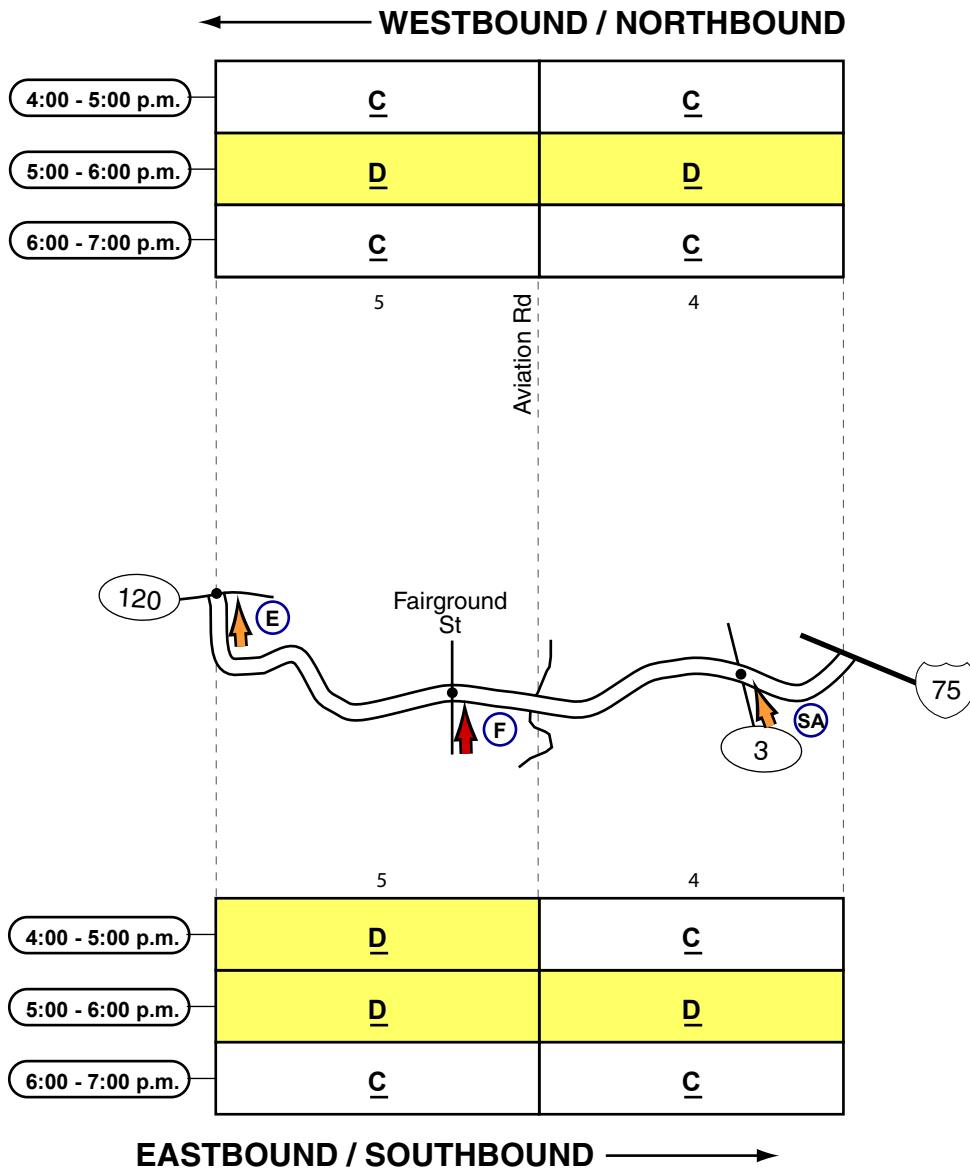


120 Loop / Marietta Parkway (Cobb County) - Morning

B
Congestion Type: Mainline Signal Queue
Location: Fairground St
Frequency: Intermittent
Direction: Eastbound
Queue Population: 20 to 30 vpl
Number of Lanes: 2

| | | | | | | |
|---------------------|------------|----------|----------|----------|-----------|----------|
| Arterial LOS Legend | <u>A</u> | <u>B</u> | <u>C</u> | <u>D</u> | <u>E</u> | <u>F</u> |
| | Very Light | Light | Moderate | Heavy | Congested | Severe |

120 Loop / Marietta Parkway (Cobb County) - Evening



120 Loop / Marietta Parkway (Cobb County) - Evening

E

Congestion Type: Left-Turn Queue

Location: SR 120 (Whitlock Ave)

Frequency: Intermittent

Direction: Northbound

Queue Population: 20 to 30 vpl

Number of Lanes: 1

F

Congestion Type: Cross Road Signal Queue

Location: Fairground St

Frequency: Most observations before 5:00 p.m.

Direction: Northbound

Queue Population: 20 to 30 vpl

Number of Lanes: 2

SA

Congestion Type: Surveyed Cross Road Signal Queue

Location: SR 3

Frequency: Intermittent

Direction: Northbound

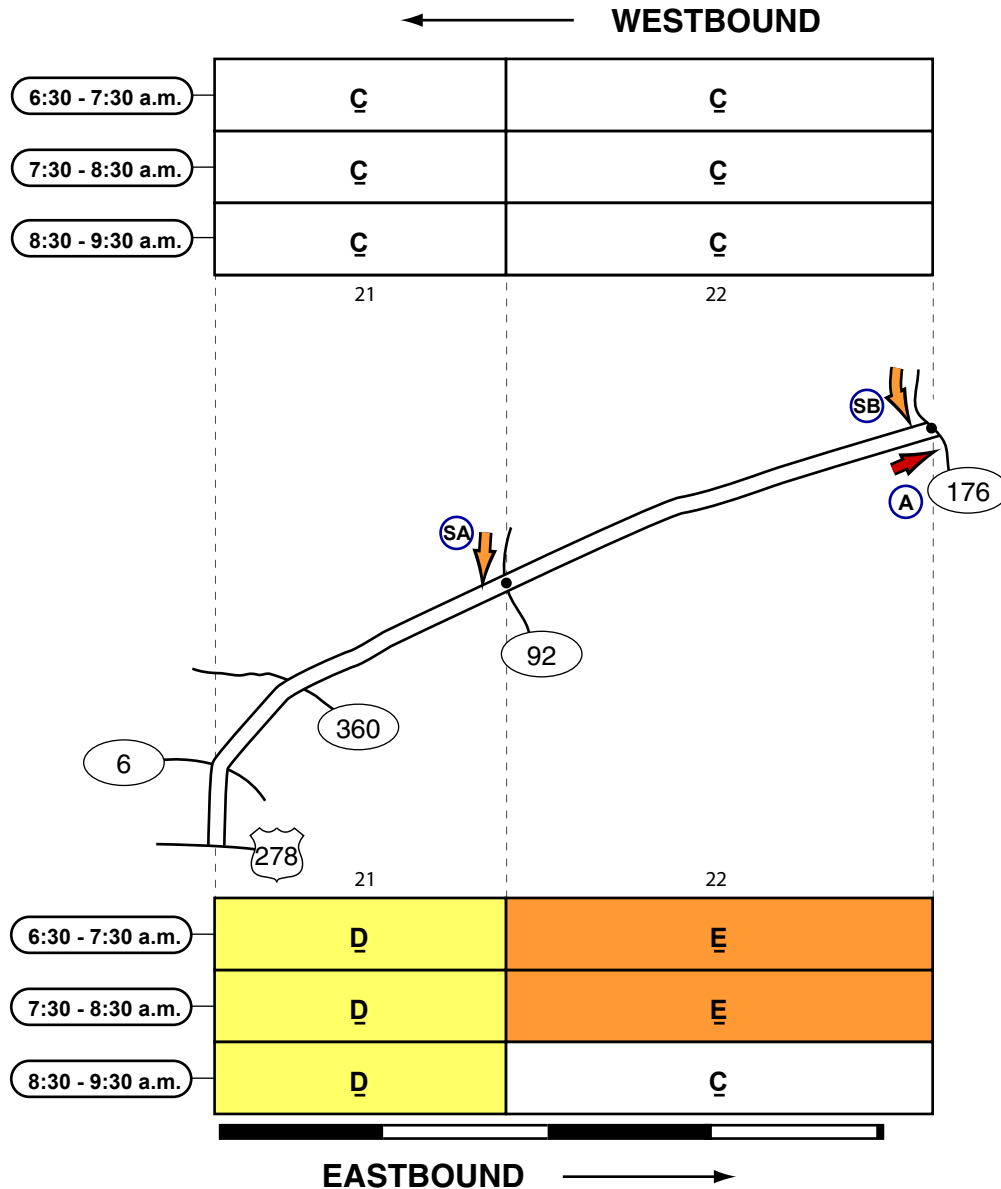
Queue Population: 20 to 30 vpl

Number of Lanes: 2

Arterial LOS Legend

| <u>A</u> | <u>B</u> | <u>C</u> | <u>D</u> | <u>E</u> | <u>F</u> |
|------------|----------|----------|----------|-----------|----------|
| Very Light | Light | Moderate | Heavy | Congested | Severe |

SR 120 (Paulding County) - Morning



A

Congestion Type: Mainline Signal Queue
 Location: SR 176 (Lost Mountain Rd)
 Frequency: Peak Hour
 Direction: Eastbound
 Queue Population: 20 to 40 vpl
 Number of Lanes: 2

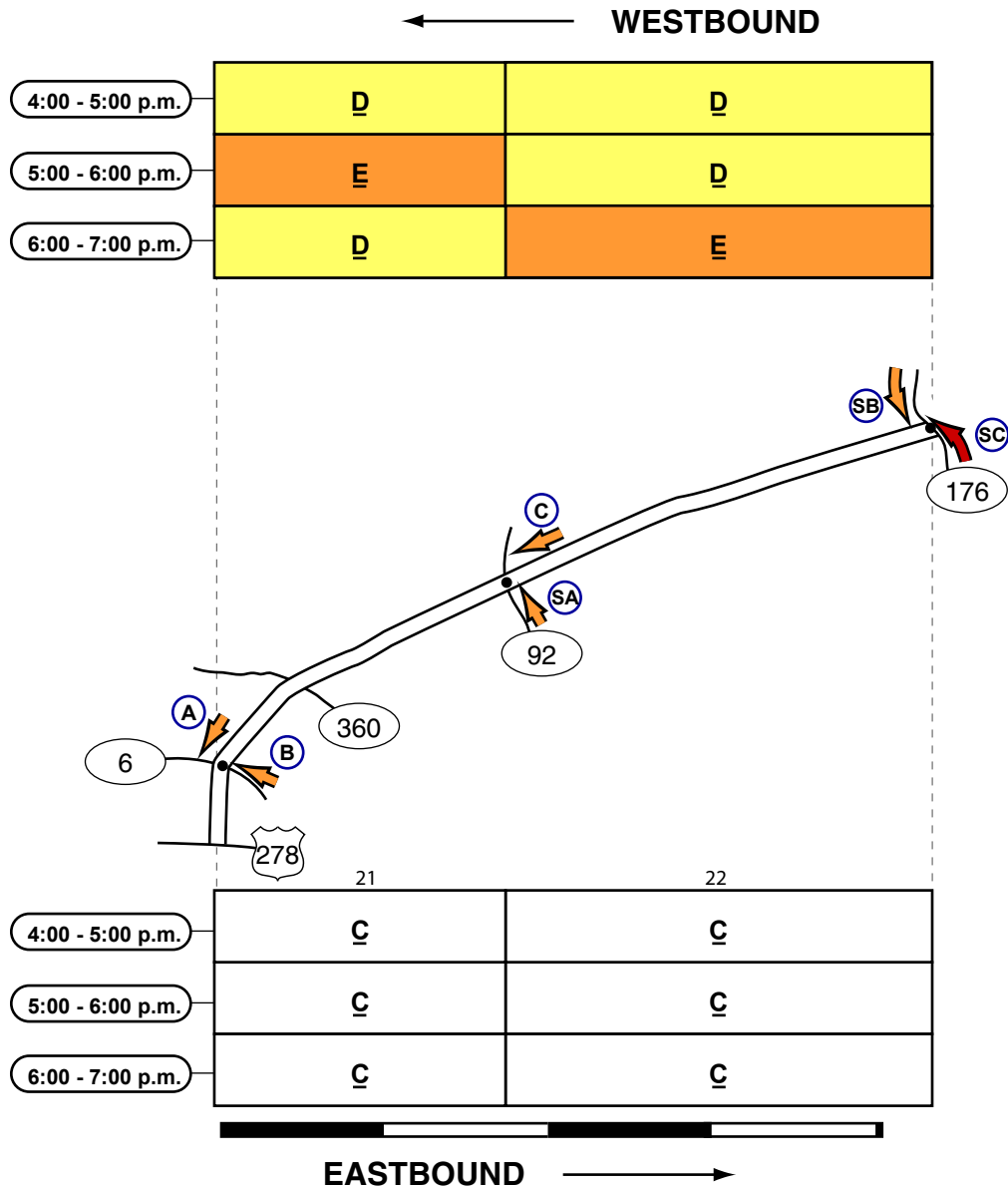
SB

Congestion Type: Surveyed Cross Road Signal Queue
 Location: SR 176
 Frequency: Intermittent
 Direction: Southbound
 Queue Population: 20 to 30 vpl
 Number of Lanes: 1

SA

Congestion Type: Surveyed Cross Road Signal Queue
 Location: SR 92
 Frequency: Intermittent
 Direction: Southbound
 Queue Population: 20 to 40 vpl
 Number of Lanes: 1

SR 120 (Paulding County) - Evening



A
 Congestion Type: Mainline Signal Queue/
 Platoons
 Location: SR 6 Business
 Frequency: Intermittent
 Direction: Westbound
 Queue Population: 20 to 30 vpl
 Number of Lanes: 2

B
 Congestion Type: Cross Road Signal Queue
 Location: SR 6 Business
 Frequency: Intermittent
 Direction: Westbound
 Queue Population: 20 to 25 vpl
 Number of Lanes: 1

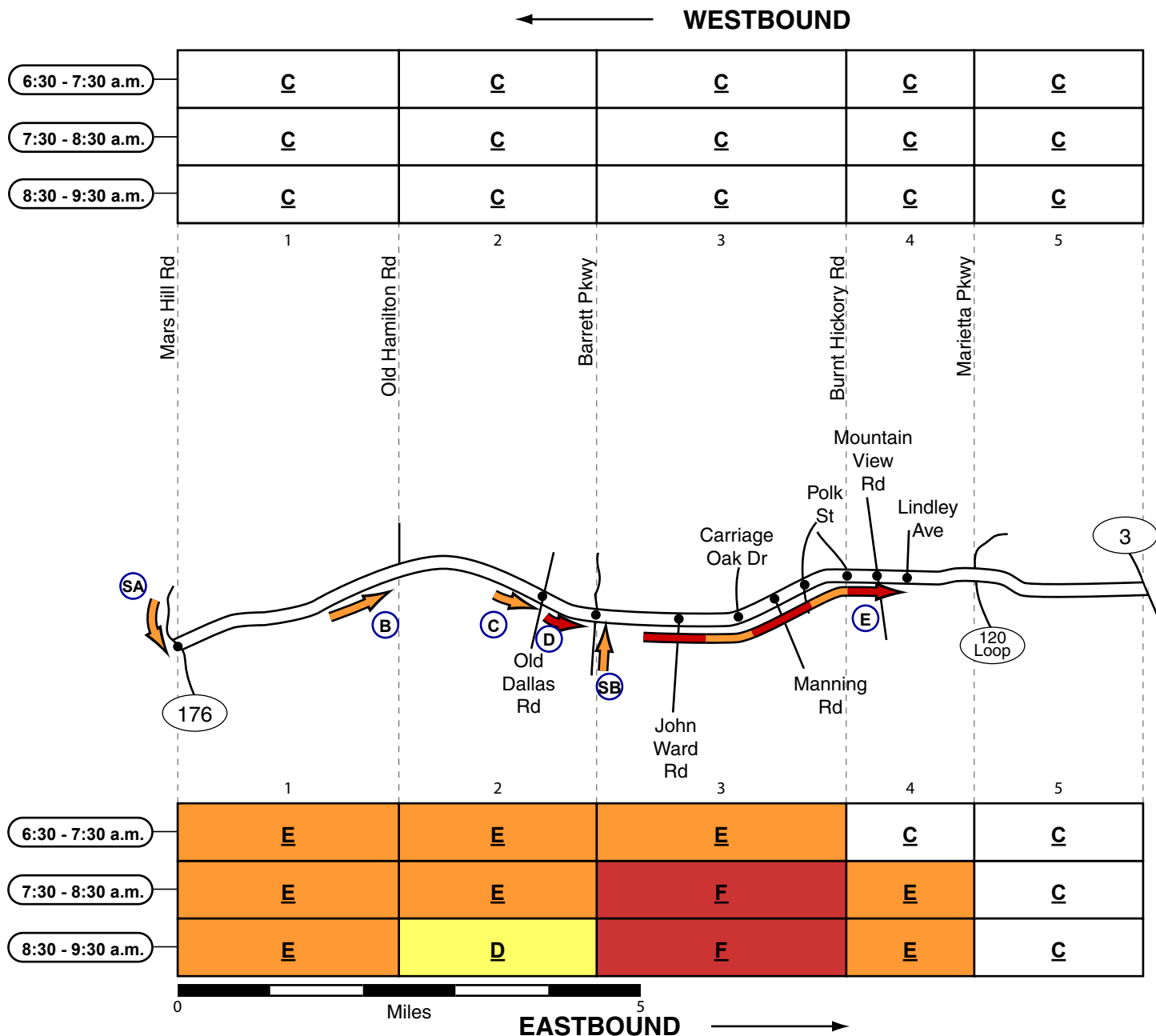
C
 Congestion Type: Mainline Signal Queue
 Location: SR 92
 Frequency: Intermittent
 Direction: Westbound
 Queue Population: 20 to 25 vpl
 Number of Lanes: 2

SA
 Congestion Type: Surveyed Cross Road
 Signal Queue
 Location: SR 92
 Frequency: Intermittent
 Direction: Northbound
 Queue Population: 20 to 30 vpl
 Number of Lanes: 1

SB
 Congestion Type: Surveyed Cross Road
 Signal Queue
 Location: SR 176
 Frequency: Intermittent
 Direction: Southbound
 Queue Population: 20 to 30 vpl
 Number of Lanes: 1

SC
 Congestion Type: Surveyed Cross Road
 Signal Queue
 Location: SR 176
 Frequency: Most Observations
 Direction: Northbound
 Queue Population: 20 to 60 vpl
 Number of Lanes: 1

Spring/Fall 2010 SR 120 (Cobb County) - Morning



Arterial LOS Legend

| A | B | C | D | E | F |
|------------|-------|----------|-------|-----------|--------|
| Very Light | Light | Moderate | Heavy | Congested | Severe |

Spring/Fall 2010
SR 120 (Cobb County) - Morning

B

Congestion Type: Platoons
Location: Between SR 176 & Old Hamilton Rd
Frequency: Intermittent
Direction: Eastbound
Platoon Population: 25 to 30 vpl
Number of Lanes: 2

C

Congestion Type: Mainline Signal Queue
Location: Old Dallas Rd
Frequency: Intermittent
Direction: Eastbound
Queue Population: 20 to 30 vpl
Number of Lanes: 2

D

Congestion Type: Mainline Signal Queue
Location: Barrett Pkwy
Frequency: Peak Hour
Direction: Eastbound
Queue Population: 20 to 40 vpl
Number of Lanes: 2
Note: During some observations, congestion extended back through the upstream signal at Old Dallas Rd.

E

Congestion Type: Mainline Signal Queue
Location: Lindley Ave
Frequency: Peak Hour
Direction: Eastbound
Note: During the peak hour, a mostly continuous zone of eastbound congestion typically extended from the signal at John Ward Rd to Lindley Ave (a distance of approximately 2 miles).

SA

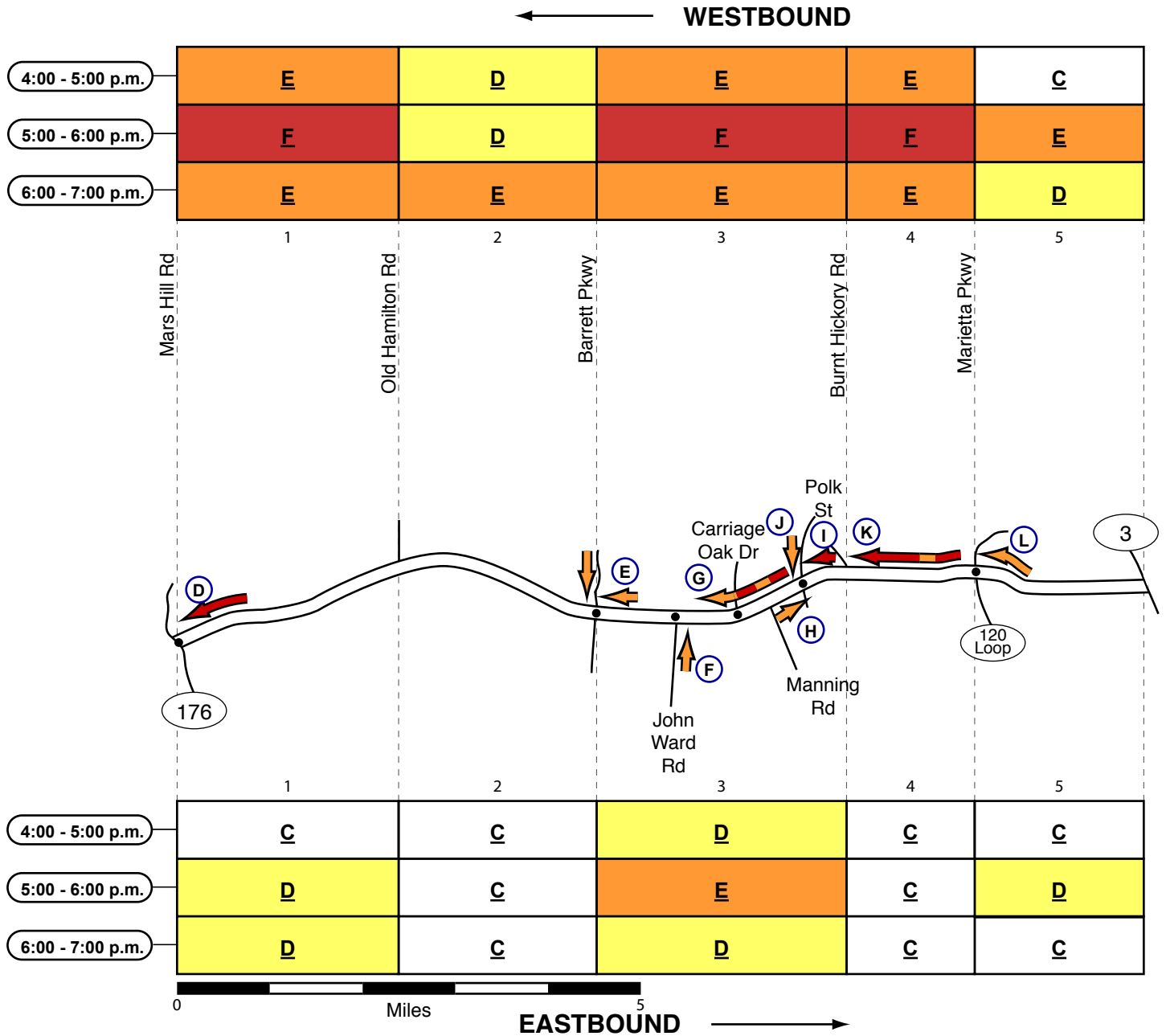
Congestion Type: Surveyed Cross Road Signal Queue
Location: SR 176
Frequency: Intermittent
Direction: Southbound
Queue Population: 20 to 30 vpl
Number of Lanes: 1

SB

Congestion Type: Surveyed Cross Road Signal Queue
Location: Barrett Pkwy
Frequency: Intermittent
Direction: Northbound
Queue Population: 20 to 50 vpl
Number of Lanes: 2

Spring/Fall 2010

SR 120 (Cobb County) - Evening



Arterial LOS Legend

| A | B | C | D | E | F |
|------------|-------|----------|-------|-----------|--------|
| Very Light | Light | Moderate | Heavy | Congested | Severe |

Spring/Fall 2010
SR 120 (Cobb County) - Evening

PERFORMANCE RATINGS

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D

Congestion Type: Mainline Signal Queue
Location: SR 176 (Mars Hill Rd)
Frequency: Most Observations
Direction: Westbound
Queue Population: 20 to 60 vpl
Number of Lanes: 2

E

Congestion Type: Mainline Signal Queue
Location: Barrett Pkwy
Frequency: Intermittent
Direction: Westbound
Queue Population: 20 to 40 vpl
Number of Lanes: 2

F

Congestion Type: Cross Road Signal Queue
Location: John Ward Rd
Frequency: Intermittent
Direction: Northbound
Queue Population: 20 to 30 vpl
Number of Lanes: 1

G

Congestion Type: Mainline Signal Queue/Platoons
Location: Vicinity of Manning Rd and Carriage Oak Dr
Frequency: Most Observations
Direction: Westbound
Queue Population: 20 to 40 vpl
Number of Lanes: 1
Note: After clearing the signal at Polk St, westbound travelers intermittently encountered congestion at the closely spaced signals at Manning Rd and Carriage Oak Dr.

H

Congestion Type: Mainline Signal Queue
Location: Polk St
Frequency: Intermittent
Direction: Eastbound
Queue Population: 20 to 30 vpl
Number of Lanes: 1

I

Congestion Type: Mainline Signal Queue
Location: Polk St
Frequency: Peak Hour
Direction: Westbound
Queue Population: 20 to 40 vpl
Number of Lanes: 1

J

Congestion Type: Cross Road Signal Queue
Location: Polk St
Frequency: Intermittent
Direction: Southbound
Queue Population: 20 to 30 vpl
Number of Lanes: 1

K

Congestion Type: Mainline Signal Queue
Location: Burnt Hickory Rd
Frequency: Most Observations
Direction: Westbound
Number of Lanes: 1
Note: During the peak period, westbound congestion approaching Burnt Hickory Rd typically extended back to the vicinity of Marietta Pkwy (a distance of approximately 1.5 miles).

L

Congestion Type: Mainline Signal Queue
Location: SR 120 Loop (Marietta Pkwy NW)
Frequency: Intermittent
Direction: Westbound
Queue Population: 20 to 25 vpl
Number of Lanes: 1

SA

Congestion Type: Surveyed Cross Road Signal Queue
Location: SR 120
Frequency: Intermittent
Direction: Southbound
Queue Population: 20 to 30 vpl
Number of Lanes: 1

SB

Congestion Type: Surveyed Cross Road Signal Queue
Location: SR 120
Frequency: Most Observations
Direction: Northbound
Queue Population: 20 to 60 vpl
Number of Lanes: 1

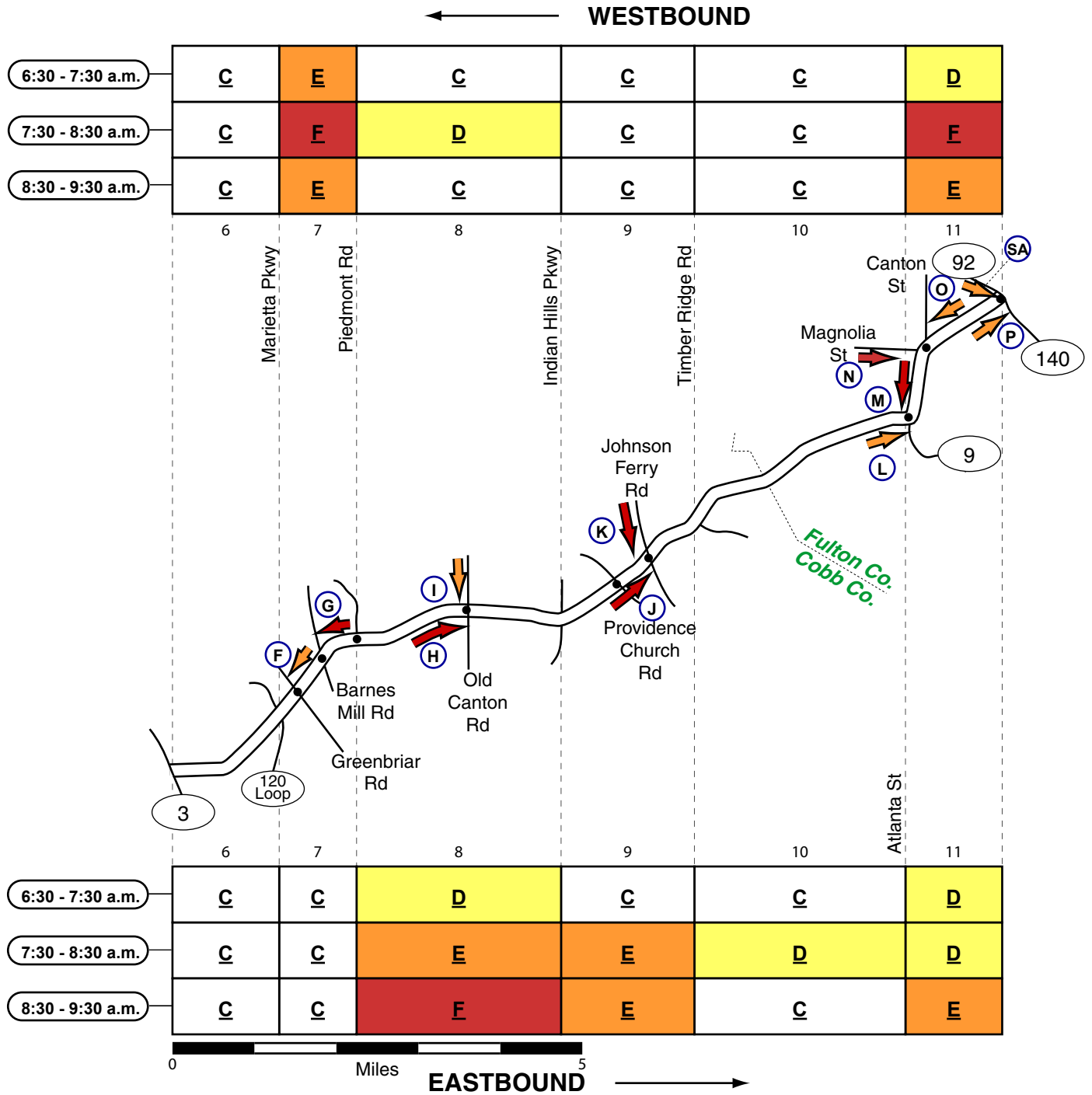
SC

Congestion Type: Surveyed Cross Road Signal Queue
Location: SR 120 (Dallas Hwy)
Frequency: Intermittent
Direction: Southbound
Queue Population: 20 to 40 vpl
Number of Lanes: 2

SD

Congestion Type: Surveyed Cross Road Signal Queue
Location: SR 120 (Whitlock Ave)
Frequency: Peak Hour
Direction: Southbound
Queue Population: 20 to 30 vpl
Number of Lanes: 2

SR 120 (Cobb & Fulton Counties) - Morning



Arterial LOS Legend

| | | | | | |
|------------|----------|----------|----------|-----------|----------|
| <u>A</u> | <u>B</u> | <u>C</u> | <u>D</u> | <u>E</u> | <u>F</u> |
| Very Light | Light | Moderate | Heavy | Congested | Severe |

SR 120 (Cobb & Fulton Counties) - Morning**F**

Congestion Type: Mainline Signal Queue
Location: Greenbriar Rd
Frequency: Intermittent
Direction: Westbound
Queue Population: 20 to 30 vpl
Number of Lanes: 2

G

Congestion Type: Mainline Signal Queue
Location: Barnes Mill Rd
Frequency: Peak Hour
Direction: Westbound
Queue Population: 20 to 50 vpl
Number of Lanes: 2

H

Congestion Type: Mainline Signal Queue
Location: Old Canton Rd
Frequency: Most Observations
Direction: Eastbound
Queue Population: 20 to 50 vpl
Number of Lanes: 2

I

Congestion Type: Cross Road Signal Queue
Location: Old Canton Rd
Frequency: Intermittent
Direction: Southbound
Queue Population: 20 to 30 vpl
Number of Lanes: 1

J

Congestion Type: Mainline Signal Queue
Location: Johnson Ferry Rd
Frequency: Peak Hour
Direction: Eastbound
Queue Population: 20 to 40 vpl
Number of Lanes: 2
Note: Eastbound congestion at Johnson Ferry Rd typically extended back through the upstream signal at Providence Church Rd.

K

Congestion Type: Cross Road Signal Queue
Location: Johnson Ferry Rd
Frequency: Peak Hour
Direction: Southbound
Queue Population: 20 to 30 vpl
Number of Lanes: 3

L

Congestion Type: Mainline Signal Queue
Location: SR 9
Frequency: Intermittent
Direction: Eastbound
Queue Population: 20 to 25 vpl
Number of Lanes: 2

M

Congestion Type: Mainline Signal Queue
Location: Atlanta St
Frequency: Peak Hour
Direction: Westbound
Queue Population: 20 to 50 vpl
Number of Lanes: 2

N

Congestion Type: Cross Road Signal Queue
Location: Magnolia St
Frequency: Most Observations
Direction: Eastbound
Queue Population: 20 to 40 vpl
Number of Lanes: 2

O

Congestion Type: Mainline Signal Queue
Location: Canton St
Frequency: Intermittent
Direction: Southbound
Queue Population: 20 to 30 vpl
Number of Lanes: 2

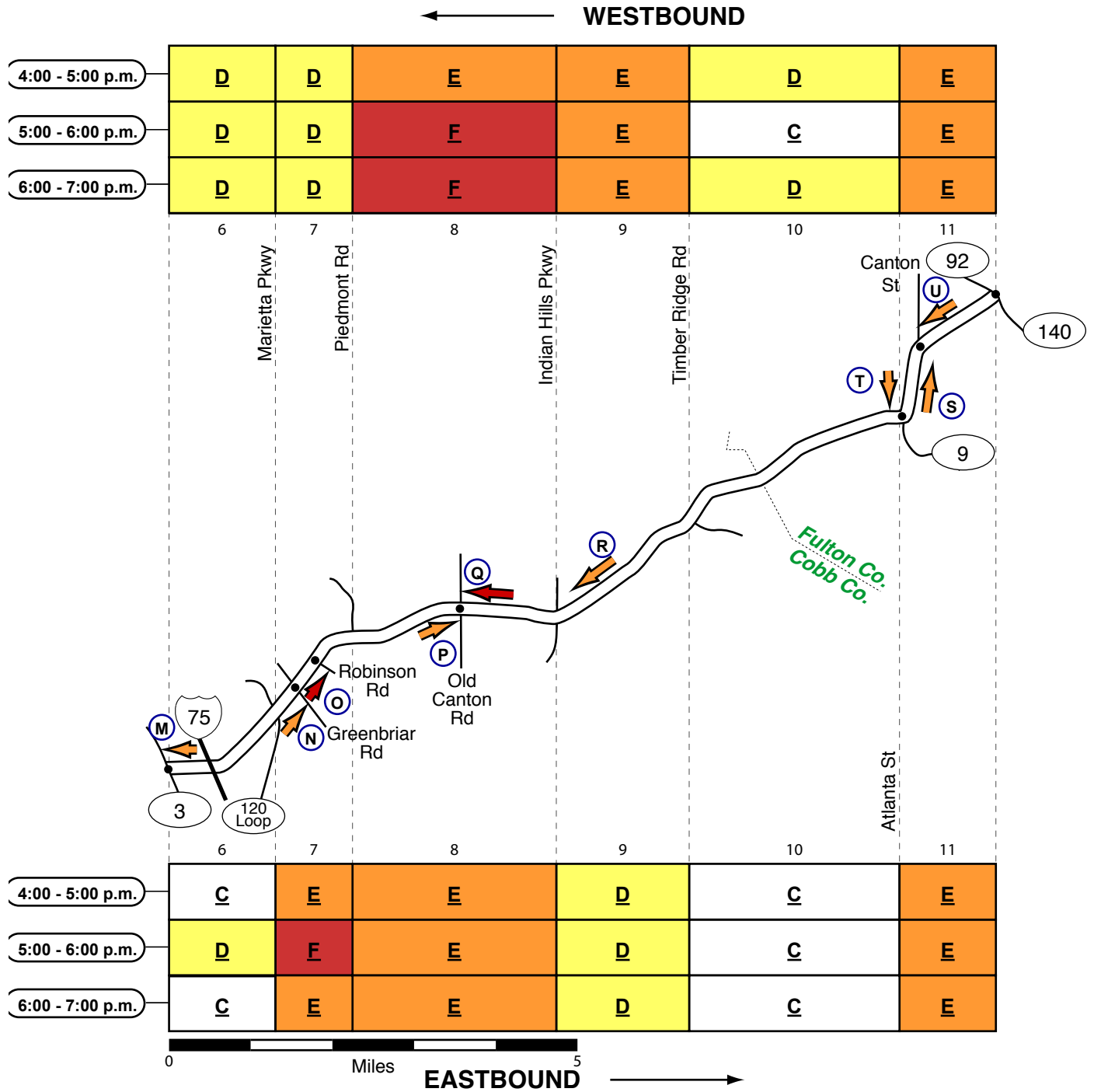
P

Congestion Type: Mainline Signal Queue
Location: SR 92/140
Frequency: Intermittent
Direction: Eastbound
Queue Population: 20 to 25 vpl
Number of Lanes: 2

SA

Congestion Type: Surveyed Cross Road Signal Queue
Location: SR 92
Frequency: Intermittent
Direction: Eastbound
Queue Population: 20 to 30 vpl
Number of Lanes: 3

SR 120 (Cobb & Fulton Counties) - Evening



Arterial LOS Legend

| | | | | | |
|------------|----------|----------|----------|-----------|----------|
| A | B | C | D | E | F |
| Very Light | Light | Moderate | Heavy | Congested | Severe |

SR 120 (Cobb & Fulton Counties) - Evening

M

Congestion Type: Mainline Signal Queue
Location: SR 3
Frequency: Intermittent
Direction: Westbound
Queue Population: 20 to 30 vpl
Number of Lanes: 1

N

Congestion Type: Mainline Signal Queue
Location: Greenbriar Rd
Frequency: Intermittent
Direction: Eastbound
Queue Population: 20 to 40 vpl
Number of Lanes: 2

O

Congestion Type: Mainline Signal Queue
Location: Robinson Rd
Frequency: Peak Hour
Direction: Eastbound
Queue Population: 20 to 45 vpl
Number of Lanes: 2

P

Congestion Type: Mainline Signal Queue
Location: Old Canton Rd
Frequency: Intermittent
Direction: Eastbound
Queue Population: 20 to 25 vpl
Number of Lanes: 2

Q

Congestion Type: Mainline Signal Queue
Location: Old Canton Rd
Frequency: Most Observations
Direction: Westbound
Queue Population: 20 to 50 vpl
Number of Lanes: 2

R

Congestion Type: Platoons
Location: Between Timber Ridge Rd & Indian Hills Pkwy
Frequency: Peak Hour
Direction: Westbound
Queue Population: 25 to 35 vpl
Number of Lanes: 2

S

Congestion Type: Mainline Signal Queue
Location: Canton St
Frequency: Intermittent
Direction: Eastbound
Queue Population: 20 to 30 vpl
Number of Lanes: 1
Note: When congested, vehicles were queued in the one thru-lane at the signal at Canton St (dedicated lane to northbound Canton St).

T

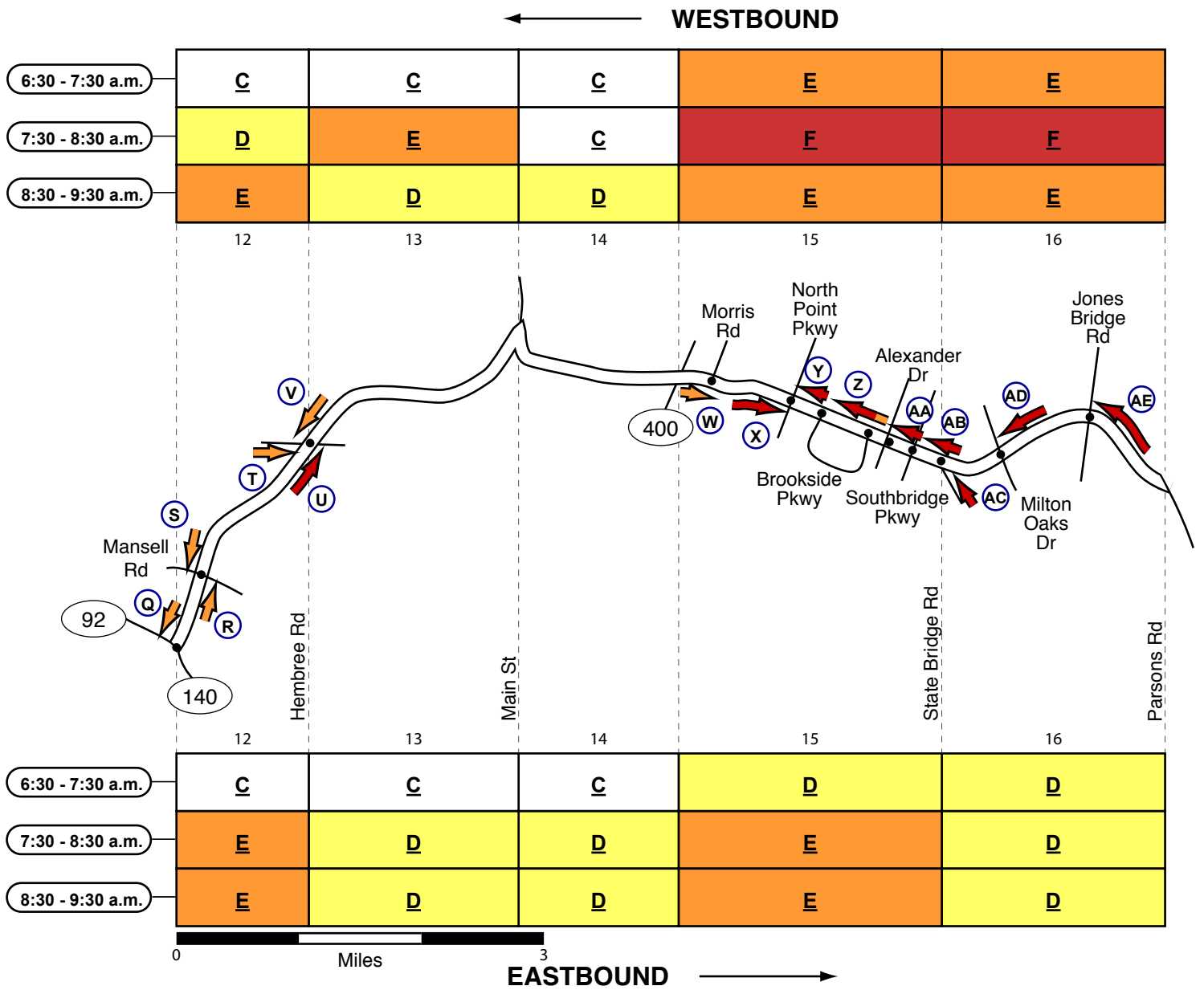
Congestion Type: Mainline Signal Queue
Location: Atlanta St
Frequency: Intermittent
Direction: Southbound
Queue Population: 20 to 30 vpl
Number of Lanes: 1
Note: When congested, vehicles were queued in the right lane approaching the ninety-degree right turn onto Marietta Hwy (continuation of SR 120).

U

Congestion Type: Mainline Signal Queue
Location: Canton St
Frequency: Intermittent
Direction: Westbound
Queue Population: 20 to 30 vpl
Number of Lanes: 2
Note: During one observation, congestion extended back through the upstream signal at Norcross St; approximately 60 vehicles per lane were queued at the signal.

Spring/Fall 2010

SR 120 (Fulton County) - Morning



Arterial LOS Legend

| A | B | C | D | E | F |
|------------|-------|----------|-------|-----------|--------|
| Very Light | Light | Moderate | Heavy | Congested | Severe |

SR 120 (Fulton County) - Morning

Q

Congestion Type: Mainline Signal Queue
 Location: SR 92
 Frequency: Intermittent
 Direction: Southbound
 Queue Population: 20 to 25 vpl
 Number of Lanes: 2

R

Congestion Type: Mainline Signal Queue
 Location: Mansell Rd
 Frequency: Intermittent
 Direction: Northbound
 Queue Population: 20 to 25 vpl
 Number of Lanes: 2

S

Congestion Type: Mainline Signal Queue
 Location: Mansell Rd
 Frequency: Intermittent
 Direction: Southbound
 Queue Population: 20 to 30 vpl
 Number of Lanes: 2

T

Congestion Type: Cross Road Signal Queue
 Location: Hembree Rd
 Frequency: Intermittent
 Direction: Eastbound
 Queue Population: 20 to 35 vpl
 Number of Lanes: 1

U

Congestion Type: Mainline Signal Queue
 Location: Hembree St
 Frequency: Peak Hour
 Direction: Northbound
 Queue Population: 20 to 30 vpl
 Number of Lanes: 2

V

Congestion Type: Mainline Signal Queue
 Location: Hembree Rd
 Frequency: Intermittent
 Direction: Westbound
 Queue Population: 20 to 25 vpl
 Number of Lanes: 2

W

Congestion Type: Left-Turn Queue
 Location: Morris Rd
 Frequency: Intermittent
 Direction: Eastbound
 Queue Population: 20 to 30 vpl
 Number of Lanes: 1

X

Congestion Type: Mainline Signal Queue
 Location: North Point Pkwy
 Frequency: Peak Hour
 Direction: Eastbound
 Queue Population: 20 to 50 vpl
 Number of Lanes: 2

Y

Congestion Type: Mainline Signal Queue
 Location: North Point Pkwy
 Frequency: Peak Hour
 Direction: Westbound
 Queue Population: 20 to 60 vpl
 Number of Lanes: 2

Z

Congestion Type: Mainline Signal Queue
 Location: Brookside Pkwy
 Frequency: Peak Hour
 Direction: Westbound
 Queue Population: 20 to 40 vpl
 Number of Lanes: 2

AA

Congestion Type: Mainline Signal Queue
 Location: Alexander Dr
 Frequency: Peak Hour
 Direction: Westbound
 Queue Population: 20 to 40 vpl
 Number of Lanes: 2

AB

Congestion Type: Mainline Signal Queue
 Location: Southbridge Pkwy
 Frequency: Peak Hour
 Direction: Westbound
 Queue Population: 20 to 40 vpl
 Number of Lanes: 2

AC

Congestion Type: Cross Road Signal Queue
 Location: State Bridge Rd
 Frequency: Peak Hour
 Direction: Northbound
 Queue Population: 20 to 40 vpl
 Number of Lanes: 2

AD

Congestion Type: Mainline Signal Queue
 Location: Milton Oaks Dr
 Frequency: Most Observations
 Direction: Westbound
 Queue Population: 20 to 80 vpl
 Number of Lanes: 1

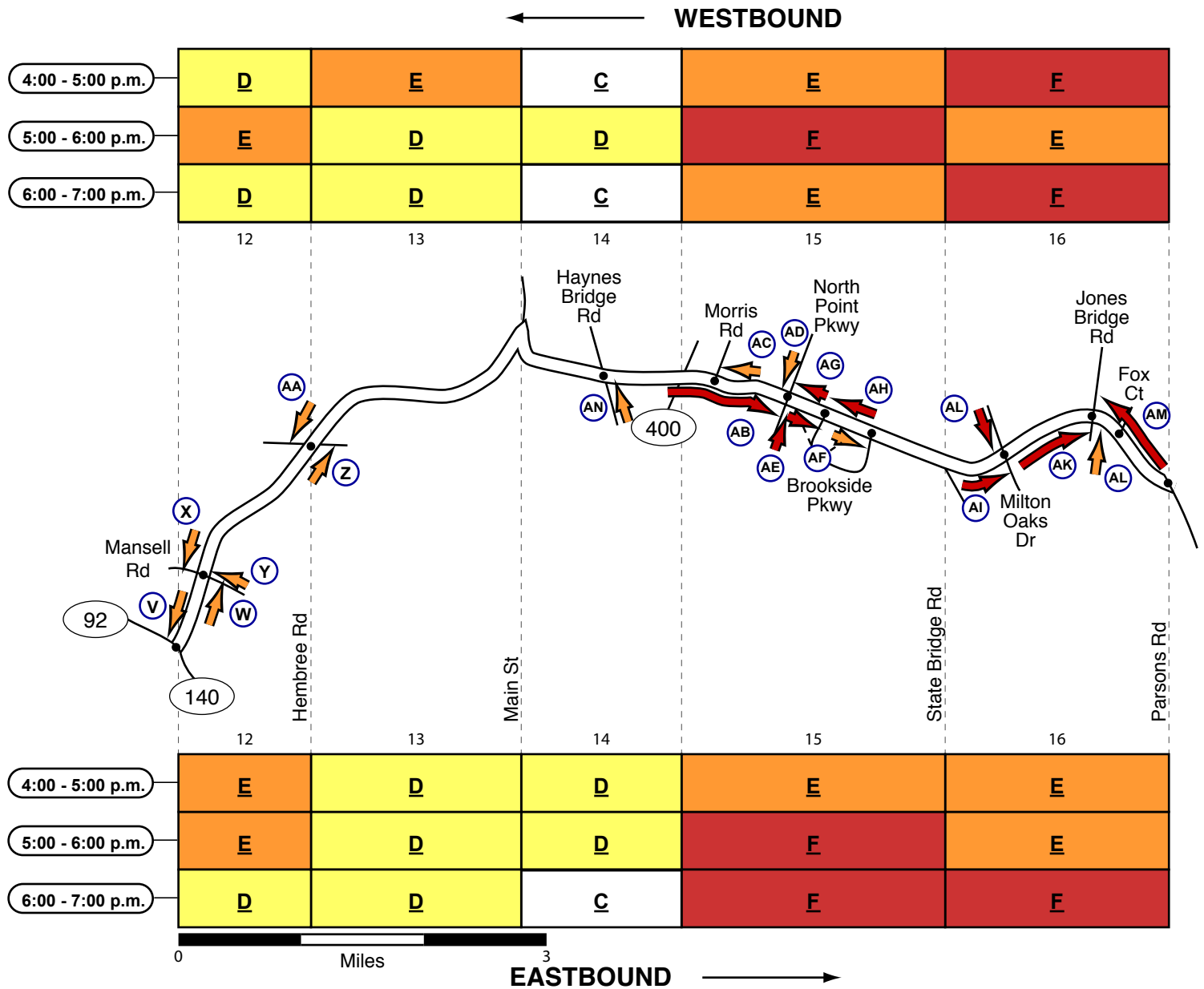
AE

Congestion Type: Mainline Signal Queue
 Location: Jones Bridge Rd
 Frequency: Peak Hour
 Direction: Westbound
 Queue Population: 20 to 100 vpl
 Number of Lanes: 1
 Note: During one observation, westbound congestion approaching Jones Bridge Rd extended all the way back to the signal at Parsons Rd (a distance of approximately one mile).

SA

Congestion Type: Surveyed Cross Road Signal Queue
 Location: SR 120 / SR 9
 Frequency: Intermittent
 Direction: Eastbound
 Queue Population: 20 to 30 vpl
 Number of Lanes: 3

SR 120 (Fulton County) - Evening



Arterial LOS Legend

| A | B | C | D | E | F |
|------------|-------|----------|-------|-----------|--------|
| Very Light | Light | Moderate | Heavy | Congested | Severe |

Spring/Fall 2010

SR 120 (Fulton County) - Evening

PERFORMANCE RATINGS

249

V

Congestion Type: Mainline Signal Queue
Location: SR 92
Frequency: Intermittent
Direction: Southbound
Queue Population: 20 to 40 vpl
Number of Lanes: 2

W

Congestion Type: Mainline Signal Queue
Location: Mansell Rd
Frequency: Intermittent
Direction: Northbound
Queue Population: 20 to 30 vpl
Number of Lanes: 2

X

Congestion Type: Mainline Signal Queue
Location: Mansell Rd
Frequency: Intermittent
Direction: Southbound
Queue Population: 20 to 30 vpl
Number of Lanes: 2

Y

Congestion Type: Cross Road Signal Queue
Location: Mansell Rd
Frequency: Intermittent
Direction: Westbound
Queue Population: 20 to 30 vpl
Number of Lanes: 2

Z

Congestion Type: Mainline Signal Queue
Location: Hembree St
Frequency: Intermittent
Direction: Northbound
Queue Population: 20 to 25 vpl
Number of Lanes: 2

AA

Congestion Type: Mainline Signal Queue
Location: Hembree St
Frequency: Intermittent
Direction: Southbound
Queue Population: 20 to 25 vpl
Number of Lanes: 2

AB

Congestion Type: Mainline Signal Queue
Location: North Point Pkwy
Frequency: Most Observations
Direction: Eastbound
Queue Population: 20 to 60 vpl
Number of Lanes: 2
Note: During some observations, congestion extended back through the upstream signals at Morris Rd and SR 400.

AC

Congestion Type: Mainline Signal Queue
Location: Morris Rd
Frequency: Intermittent
Direction: Westbound
Queue Population: 20 to 30 vpl
Number of Lanes: 3

AD

Congestion Type: Cross Road Signal Queue
Location: North Point Pkwy
Frequency: Intermittent
Direction: Southbound
Queue Population: 20 to 30 vpl
Number of Lanes: 3
Note: During some observations, congestion was limited to the left lane.

AE

Congestion Type: Cross Road Signal Queue
Location: North Point Pkwy
Frequency: Most Observations
Direction: Northbound
Queue Population: 20 to 40 vpl
Number of Lanes: 2

AF

Congestion Type: Mainline Signal Queue
Location: Brookside Pkwy
Frequency: Peak Hour
Direction: Eastbound
Queue Population: 20 to 40 vpl
Number of Lanes: 2

AG

Congestion Type: Mainline Signal Queue
Location: North Point Pkwy
Frequency: Most Observations
Direction: Westbound
Queue Population: 20 to 60 vpl
Number of Lanes: 2

AH

Congestion Type: Mainline Signal Queue
Location: Brookside Pkwy
Frequency: Peak Hour
Direction: Westbound
Queue Population: 20 to 40 vpl
Number of Lanes: 2

AI

Congestion Type: Mainline Signal Queue
Location: Milton Oaks Dr
Frequency: Most Observations
Direction: Eastbound
Queue Population: 20 to 70 vpl
Number of Lanes: 1

AJ

Congestion Type: Cross Road Signal Queue
Location: Milton Oaks Dr
Frequency: Most Observations
Direction: Southbound
Queue Population: 20 to 50 vpl
Number of Lanes: 1

AK

Congestion Type: Mainline Signal Queue
Location: Jones Bridge Rd
Frequency: Most Observations
Direction: Eastbound
Queue Population: 20 to 80 vpl
Number of Lanes: 1

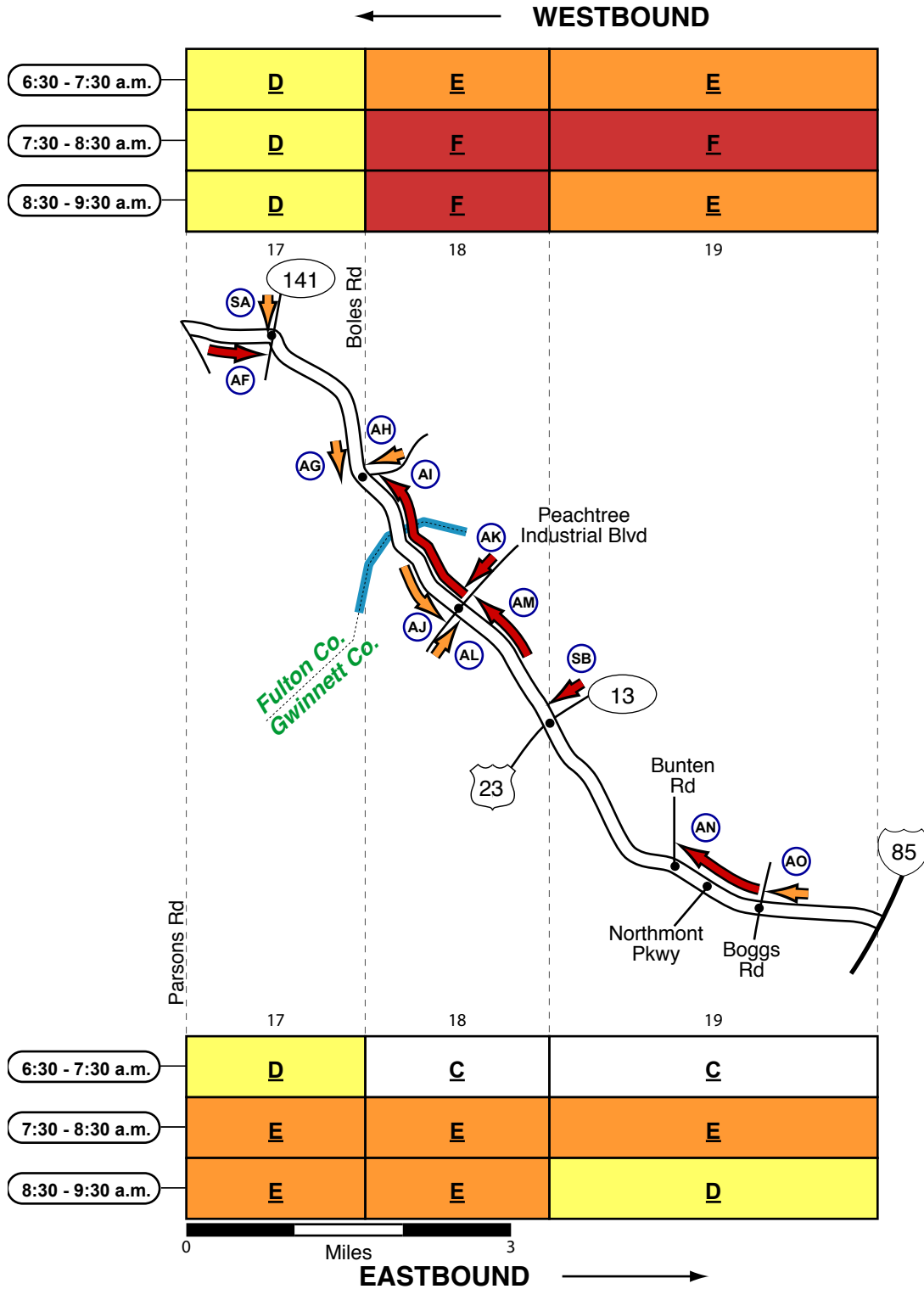
AL

Congestion Type: Cross Road Signal Queue
Location: Jones Bridge Rd
Frequency: Intermittent
Direction: Northbound
Queue Population: 20 to 30 vpl
Number of Lanes: 1

AM

Congestion Type: Mainline Signal Queue
Location: Jones Bridge Rd/Fox Ct
Frequency: Most Observations
Direction: Westbound
Queue Population: 20 to 130 vpl
Number of Lanes: 1
Note: During the peak period, westbound congestion approaching Jones Bridge Rd typically extended back to the vicinity of Parsons Rd (a distance of approximately one mile).

SR 120 (Fulton & Gwinnett Counties) - Morning



Arterial LOS Legend

| A | B | C | D | E | F |
|------------|-------|----------|-------|-----------|--------|
| Very Light | Light | Moderate | Heavy | Congested | Severe |

SR 120 (Fulton & Gwinnett Counties) - Morning

AF

Congestion Type: Mainline Signal Queue
Location: SR 141
Frequency: Peak Hour
Direction: Eastbound
Queue Population: 20 to 40 vpl
Number of Lanes: 1

AG

Congestion Type: Mainline Signal Queue
Location: Boles Rd
Frequency: Intermittent
Direction: Eastbound
Queue Population: 20 to 35 vpl
Number of Lanes: 1
Note: During some observations, the head of the queue was found in the dedicated left-turn lane at the signal.

AH

Congestion Type: Cross Road Signal Queue
Location: Boles Rd
Frequency: Intermittent
Direction: Westbound
Queue Population: 20 to 40 vpl
Number of Lanes: 1

AI

Congestion Type: Mainline Signal Queue
Location: Boles Rd
Frequency: Most Observations
Direction: Westbound
Queue Population: 20 to 120 vpl
Number of Lanes: 1
Note: During the peak period, westbound congestion approaching Boles Rd typically extended back to the upstream signal at Peachtree Industrial Blvd (a distance of approximately one mile).

AJ

Congestion Type: Mainline Signal Queue
Location: Peachtree Industrial Blvd
Frequency: Most Observations
Direction: Eastbound
Queue Population: 20 to 100 vpl
Number of Lanes: 1

AK

Congestion Type: Cross Road Signal Queue
Location: Peachtree Industrial Blvd
Frequency: Most Observations
Direction: Southbound
Queue Population: 20 to 60 vpl
Number of Lanes: 2
Note: Construction on the southwest corner of the intersection at SR 120 and Peachtree Industrial Blvd did not appear to impact congestion on the southbound approach. The dedicated right-turn lane onto westbound SR 120 was also congested during most observations.

AL

Congestion Type: Cross Road Signal Queue
Location: Peachtree Industrial Blvd
Frequency: Intermittent
Direction: Northbound
Queue Population: 20 to 30 vpl
Number of Lanes: 1
Note: When congested, vehicles were queued in the dedicated left- turn lane.

AM

Congestion Type: Mainline Signal Queue
Location: Peachtree Industrial Blvd
Frequency: Most Observations
Direction: Westbound
Queue Population: 20 to 70 vpl
Number of Lanes: 1

AN

Congestion Type: Mainline Signal Queue
Location: Bunten Rd
Frequency: Intermittent, peak hour
Direction: Westbound
Queue Population: 60 to 100 vpl
Number of Lanes: 1
Note: When congested, westbound congestion approaching Bunten Rd extended back through the upstream signal at Northmont Pkwy. This congestion was found during two observations only, each time at 8:00 a.m.

AO

Congestion Type: Mainline Signal Queue
Location: Boggs Rd
Frequency: Intermittent
Direction: Westbound
Queue Population: 20 to 25 vpl
Number of Lanes: 1

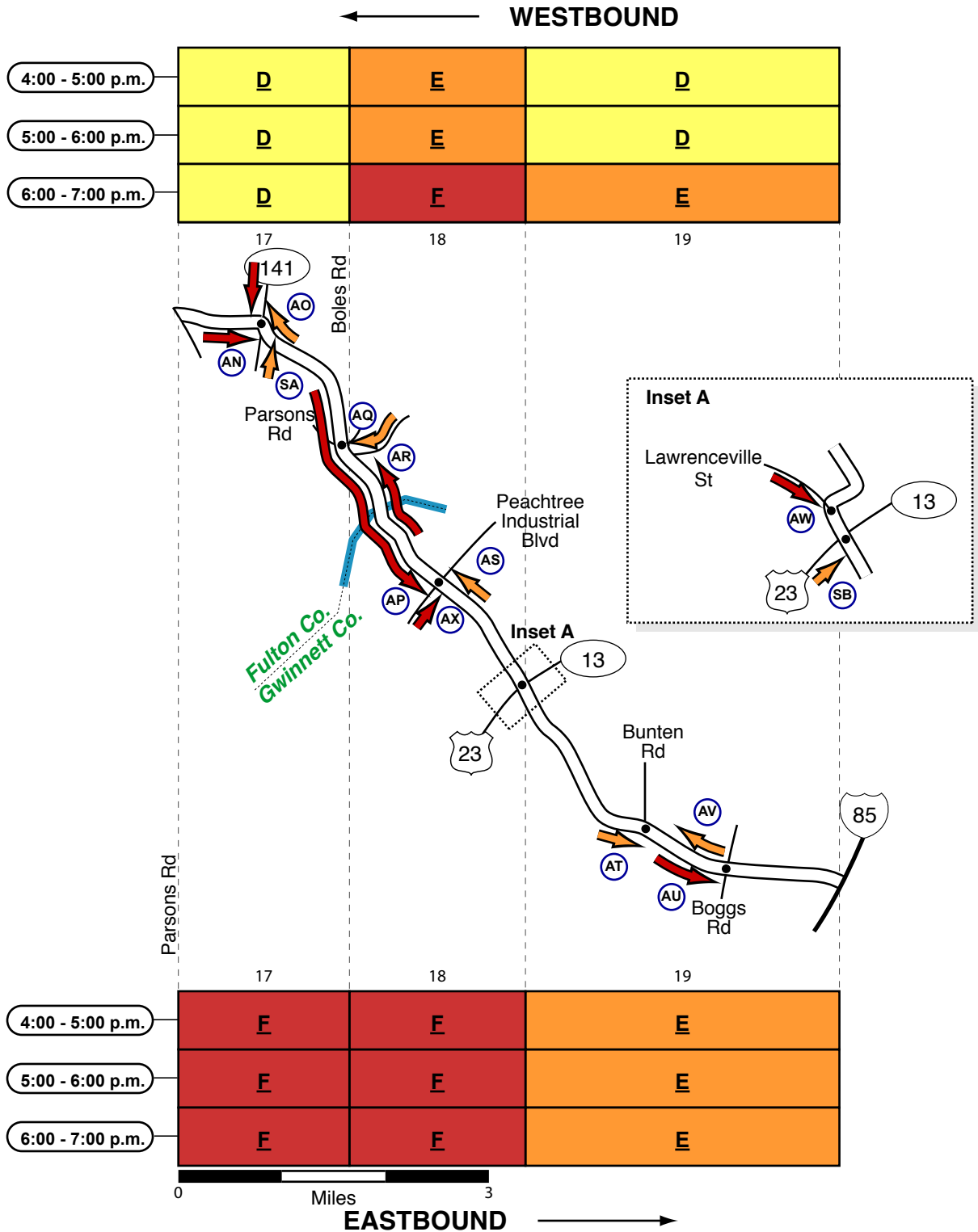
SA

Congestion Type: Surveyed Cross Road Signal Queue
Location: SR 141
Frequency: Intermittent
Direction: Southbound
Queue Population: 20 to 40 vpl
Number of Lanes: 2
Note: During some observations, southbound congestion approaching SR 120 was limited to the the left lane.

SB

Congestion Type: Surveyed Cross Road Signal Queue
Location: SR 113
Frequency: Peak Hour
Direction: Southbound
Queue Population: 25 to 35 vpl
Number of Lanes: 2

SR 120 (Fulton & Gwinnett Counties) - Evening



SR 120 (Fulton & Gwinnett Counties) - Evening**AN**

Congestion Type: Mainline Signal Queue
Location: SR 141
Frequency: Most Observations
Direction: Eastbound
Queue Population: 20 to 60 vpl
Number of Lanes: 1

AO

Congestion Type: Mainline Signal Queue
Location: SR 141
Frequency: Intermittent
Direction: Westbound
Queue Population: 20 to 25 vpl
Number of Lanes: 1

AP

Congestion Type: Mainline Signal Queue
Location: Peachtree Industrial Blvd
Frequency: Most Observations
Direction: Eastbound
Queue Population: 20 to 150 vpl
Number of Lanes: 1
Note: During most observations, eastbound congestion approaching the signal at Peachtree Industrial Blvd extended back across the Chattahoochee River and through the upstream signals at Boles Rd and Parsons Rd (a distance of one to two miles).

AQ

Congestion Type: Cross Road Signal Queue
Location: Boles Rd
Frequency: Intermittent
Direction: Westbound
Queue Population: 20 to 40 vpl
Number of Lanes: 1

AR

Congestion Type: Mainline Signal Queue
Location: Boles Rd
Frequency: Intermittent
Direction: Westbound
Queue Population: 20 to 100 vpl
Number of Lanes: 1

AS

Congestion Type: Mainline Signal Queue
Location: Peachtree Industrial Blvd
Frequency: Intermittent
Direction: Westbound
Queue Population: 20 to 30 vpl
Number of Lanes: 1

AT

Congestion Type: Mainline Signal Queue
Location: Bunten Rd
Frequency: Intermittent
Direction: Eastbound
Queue Population: 20 to 40 vpl
Number of Lanes: 1

AU

Congestion Type: Mainline Signal Queue
Location: Boggs Rd
Frequency: Peak Hour
Direction: Eastbound
Queue Population: 20 to 60 vpl
Number of Lanes: 1

AV

Congestion Type: Platoons
Location: Between I-85 & SR 13
Frequency: Intermittent
Direction: Westbound
Platoon Population: 25 to 30 vpl
Number of Lanes: 1

AW

Congestion Type: Cross Road Signal Queue
Location: Lawrenceville St
Frequency: Most Observations
Direction: Eastbound
Queue Population: 20 to 60 vpl
Number of Lanes: 1

AX

Congestion Type: Cross Road Signal Queue
Location: Peachtree Industrial Blvd
Frequency: Most Observations
Direction: Northbound
Queue Population: 20 to 60 vpl
Number of Lanes: 2
Note: During some observations, congestion was also found in the dedicated left turn lane; construction at the intersection at SR 120 and Peachtree Industrial Blvd may have exacerbated congestion.

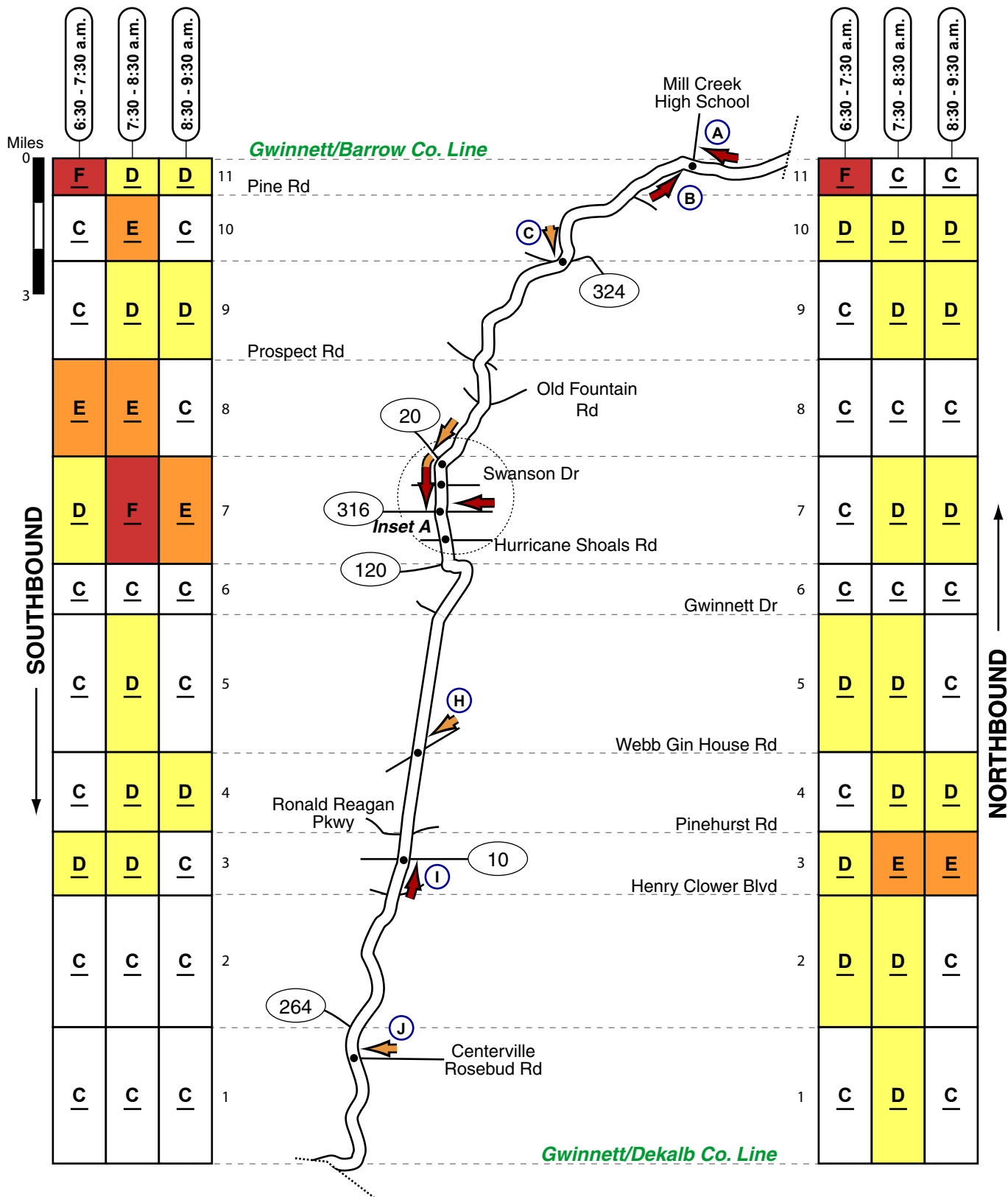
SA

Congestion Type: Surveyed Cross Road Signal Queue
Location: SR 141
Frequency: Intermittent
Direction: Northbound
Queue Population: 20 to 30 vpl
Number of Lanes: 2

SB

Congestion Type: Surveyed Cross Road Signal Queue
Location: SR 113
Frequency: Intermittent
Direction: Northbound
Queue Population: 20 to 25 vpl
Number of Lanes: 2

SR 124 (Gwinnett County) - Morning



SR 124 (Gwinnett County) - Morning

A
 Congestion Type: Mainline Signal Queue
 Location: Mill Creek High School
 Frequency: Most observations before 7:30 a.m.
 Direction: Southbound
 Queue Population: 40 to 70 vpl
 Number of Lanes: 1

B
 Congestion Type: Mainline Signal Queue
 Location: Mill Creek High School
 Frequency: Most observations before 7:30 a.m.
 Direction: Northbound
 Queue Population: 20 to 50 vpl
 Number of Lanes: 1
 Note: On some days but not others, congestion backed through the upstream signal at Mineral Springs Rd

C
 Congestion Type: Mainline Signal Queue
 Location: SR 324
 Frequency: Intermittent
 Direction: Southbound
 Queue Population: 20 to 30 vpl
 Number of Lanes: 1

D
 Congestion Type: Mainline Signal Queue
 Location: SR 20
 Frequency: Intermittent
 Direction: Southbound
 Queue Population: 20 to 30 vpl
 Number of Lanes: 2

E
 Congestion Type: Mainline Signal Queue
 Location: Swanson Dr
 Frequency: Most observations after 7:30 a.m.
 Direction: Southbound
 Queue Population: 25 to 45 vpl
 Number of Lanes: 2

F
 Congestion Type: Mainline Signal Queue
 Location: SR 316
 Frequency: Most observations after 7:00 a.m.
 Direction: Southbound
 Queue Population: 20 to 40 vpl
 Number of Lanes: 2
 Note: During one observation, congestion backed through the upstream signals at Swanson Dr and SR 124.

G
 Congestion Type: Cross Road Signal Queue
 Location: Hurricane Shoals Rd
 Frequency: Peak Hour
 Direction: Westbound
 Queue Population: 20 to 30 vpl
 Number of Lanes: 1

H
 Congestion Type: Cross Road Signal Queue
 Location: Webb Gin House Rd
 Frequency: Intermittent
 Direction: Westbound
 Queue Population: 20 to 30 vpl
 Number of Lanes: 1

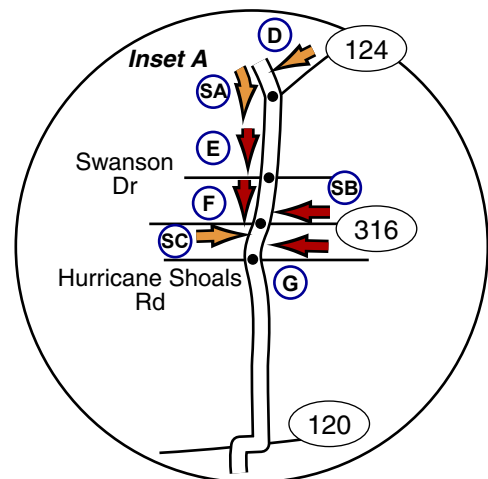
I
 Congestion Type: Mainline Signal Queue
 Location: SR 10
 Frequency: Peak Hour
 Direction: Northbound
 Queue Population: 20 to 30 vpl
 Number of Lanes: 2

J
 Congestion Type: Cross Road Signal Queue
 Location: Centerville Rosebud Rd
 Frequency: Intermittent
 Direction: Westbound
 Queue Population: 30 to 40 vpl
 Number of Lanes: 1
 Note: Congestion was exacerbated by ongoing construction on Centerville Rosebud Rd.

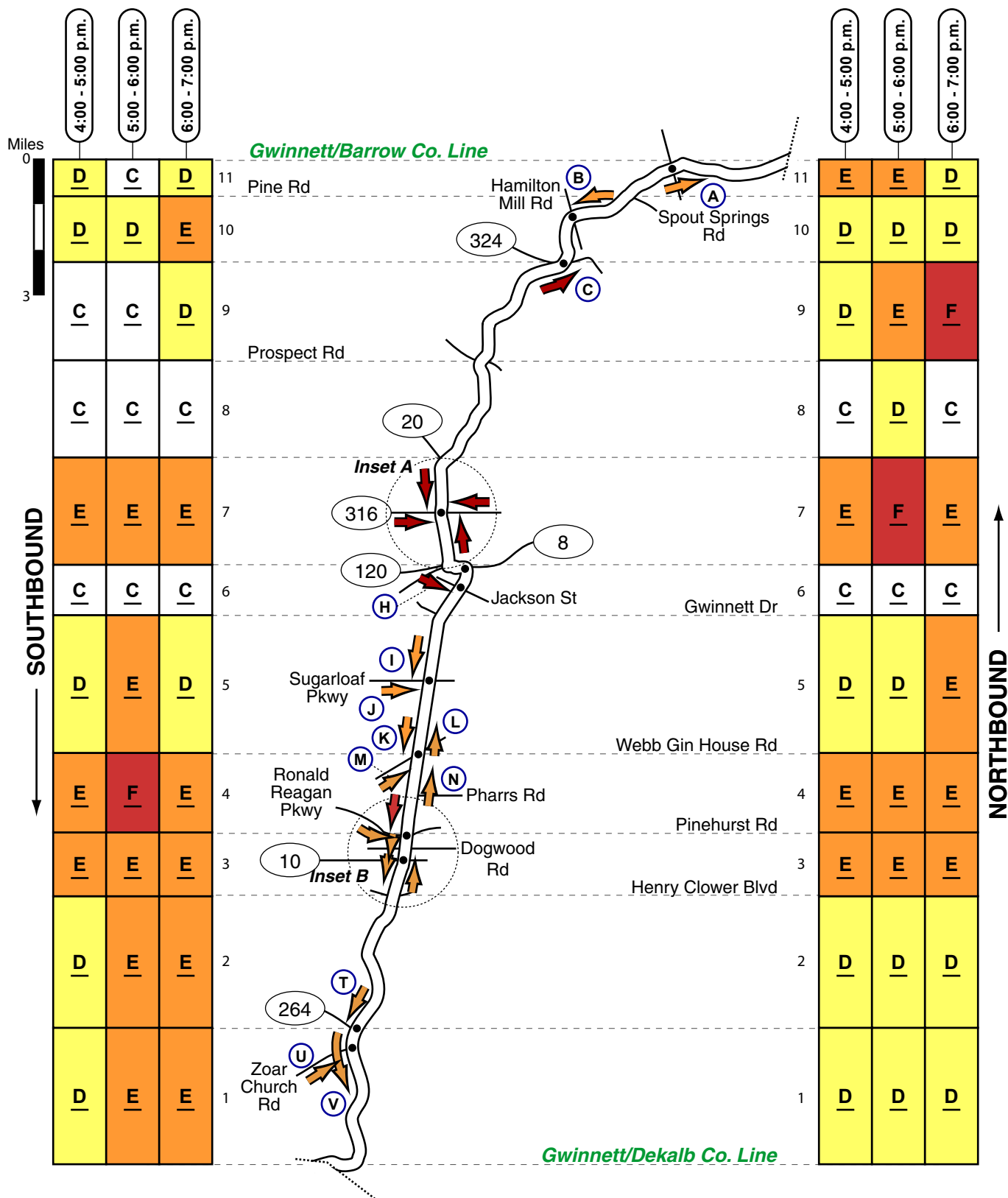
SA
 Congestion Type: Surveyed Cross Road Signal Queue
 Location: SR 20
 Frequency: Intermittent
 Direction: Southbound
 Queue Population: 20 to 40 vpl
 Number of Lanes: 2

SB
 Congestion Type: Surveyed Cross Road Signal Queue/Platoons
 Location: SR 316
 Frequency: Most Observations
 Direction: Westbound
 Queue Population: 20 to 70 vpl
 Number of Lanes: 2

SC
 Congestion Type: Surveyed Cross Road Signal Queue/Platoons
 Location: SR 316
 Frequency: Intermittent
 Direction: Eastbound
 Queue Population: 20 to 30 vpl
 Number of Lanes: 2



SR 124 (Gwinnett County) - Evening



SR 124 (Gwinnett County) - Evening

A
Congestion Type: Platoons
Location: vicinity of Spout Springs Rd
Frequency: Intermittent
Direction: Northbound
Platoon Population: 25 to 35 vpl
Number of Lanes: 1

B
Congestion Type: Mainline Signal Queue
Location: Hamilton Mill Rd
Frequency: Intermittent
Direction: Southbound
Queue Population: 20 to 40 vpl
Number of Lanes: 1

C
Congestion Type: Mainline Signal Queue
Location: SR 324
Frequency: Most Observations
Direction: Northbound
Queue Population: 20 to 40 vpl
Number of Lanes: 1
Note: During one observation only, the contained approximately 80 vehicles.

D
Congestion Type: Mainline Signal Queue
Location: SR 316
Frequency: Most Observations
Direction: Southbound
Queue Population: 20 to 50 vpl
Number of Lanes: 2

E
Congestion Type: Mainline Signal Queue
Location: SR 316
Frequency: Most Observations
Direction: Northbound
Queue Population: 20 to 50 vpl
Number of Lanes: 2

F
Congestion Type: Mainline Signal Queue
Location: Hurricane Shoals Rd
Frequency: Peak Hour
Direction: Northbound
Queue Population: 30 to 50 vpl
Number of Lanes: 2

G
Congestion Type: Cross Road
Signal Queue
Location: Hurricane Shoals Rd
Frequency: Intermittent
Direction: Eastbound
Queue Population: 20 to 40 vpl
Number of Lanes: 1

H
Congestion Type: Cross Road
Signal Queue
Location: Jackson St
Frequency: Most Observations
Direction: Eastbound
Queue Population: 30 to 50 vpl
Number of Lanes: 1

I
Congestion Type: Mainline Signal Queue
Location: Sugarloaf Parkway
Frequency: One time only
Direction: Southbound
Queue Population: 20 to 25 vpl
Number of Lanes: 2

J
Congestion Type: Cross Road
Signal Queue
Location: Sugarloaf Parkway
Frequency: Intermittent
Direction: Eastbound
Queue Population: 20 to 40 vpl
Number of Lanes: 2

K
Congestion Type: Mainline Signal Queue
Location: Webb Gin House Rd
Frequency: Intermittent
Direction: Southbound
Queue Population: 20 to 25 vpl
Number of Lanes: 2

L
Congestion Type: Platoons
Location: Approaching Webb Ginn House Rd
Frequency: Intermittent
Direction: Northbound
Platoon Population: 25 to 35 vpl
Number of Lanes: 2

M
Congestion Type: Cross Road
Signal Queue
Location: Webb Gin House Rd
Frequency: Intermittent
Direction: Eastbound
Queue Population: 20 to 30 vpl
Number of Lanes: 1

N
Congestion Type: Platoons
Location: Vicinity of Pharrs Rd
Frequency: Intermittent
Direction: Northbound
Platoon Population: 25 to 30 vpl
Number of Lanes: 2

O
Congestion Type: Mainline Signal Queue
Location: Ronald Reagan Parkway
Frequency: Most Observations
Direction: Southbound
Queue Population: 20 to 40 vpl
Number of Lanes: 2

P
Congestion Type: Cross Road
Signal Queue
Location: Ronald Reagan Parkway
Frequency: Intermittent
Direction: Eastbound
Queue Population: 25 to 35 vpl
Number of Lanes: 2

Q
Congestion Type: Platoons
Location: Between Pinehurst Rd & Henry Clower Blvd
Frequency: Intermittent
Direction: Southbound
Platoon Population: 25 to 35 vpl
Number of Lanes: 2

R
Congestion Type: Mainline Signal Queue
Location: Dogwood Rd
Frequency: Intermittent
Direction: Southbound
Queue Population: 20 to 30 vpl
Number of Lanes: 2

S
Congestion Type: Platoons
Location: Between Henry Clower Blvd & Pinehurst Rd
Frequency: Most Observations
Direction: Northbound
Platoon Population: 25 to 35 vpl
Number of Lanes: 2

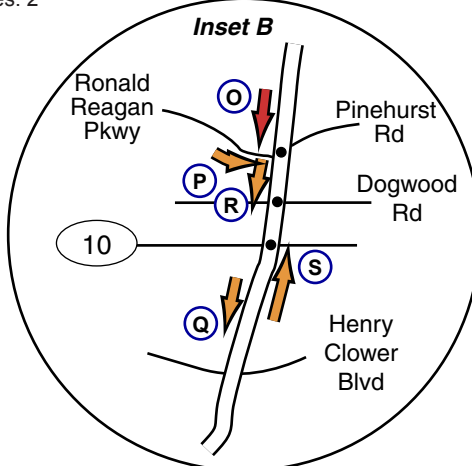
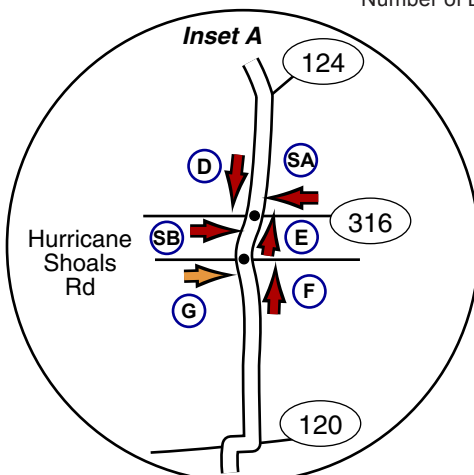
T
Congestion Type: Mainline Signal Queue
Location: SR 264
Frequency: Intermittent
Direction: Southbound
Queue Population: 20 to 30 vpl
Number of Lanes: 2

U
Congestion Type: Cross Road
Signal Queue
Location: Zoar Church Rd
Frequency: One time only
Direction: Eastbound
Queue Population: 20 to 25 vpl
Number of Lanes: 1

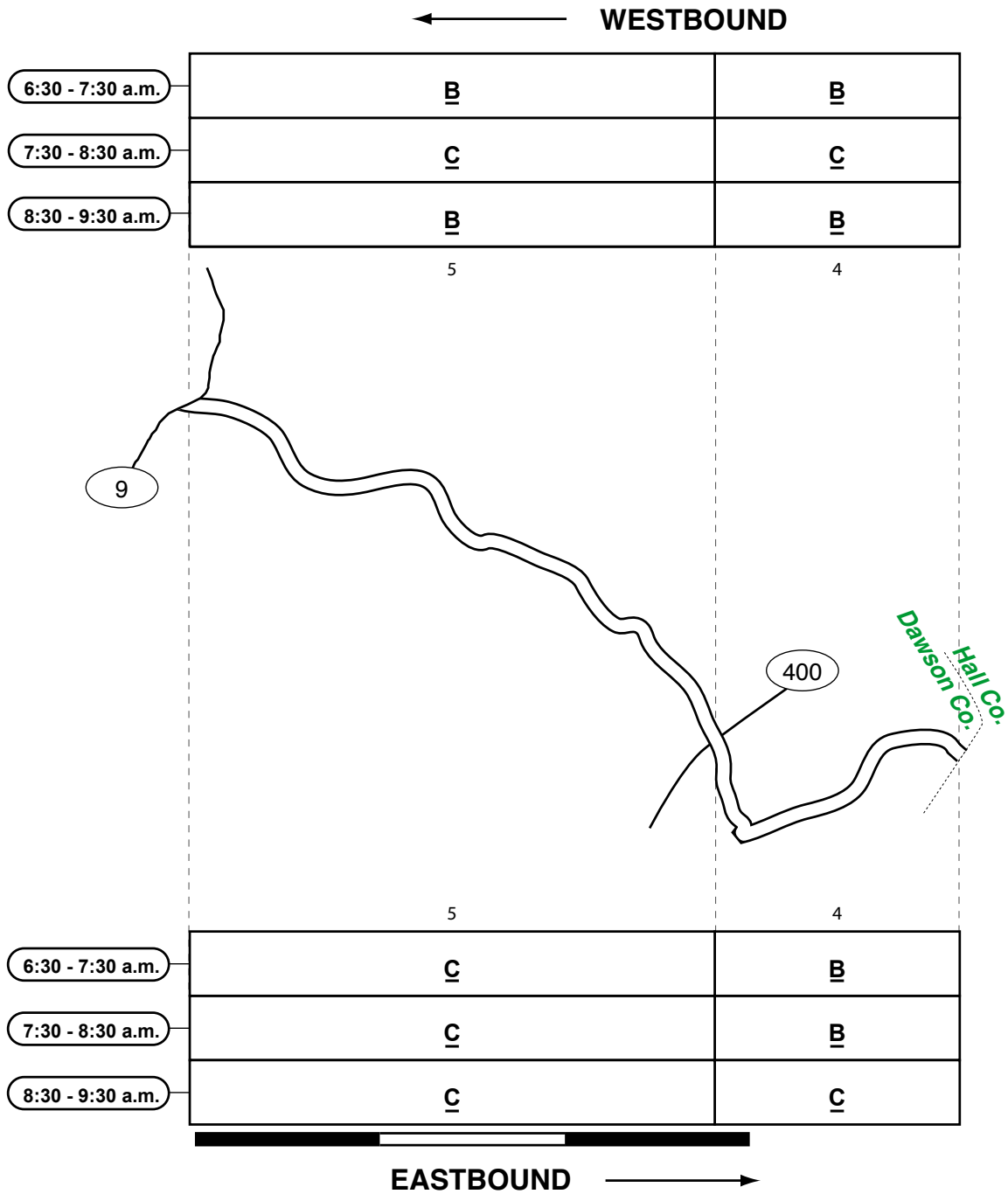
V
Congestion Type: Platoons
Location: Between SR 264 & Annistown Rd
Frequency: Intermittent
Direction: Southbound
Platoon Population: 25 to 35 vpl
Number of Lanes: 2

SA
Congestion Type: Surveyed Cross Road Signal Queue
Location: SR 316
Frequency: Most Observations
Direction: Eastbound
Queue Population: 20 to 70 vpl
Number of Lanes: 2
Note: During some observations, congestion backed through the upstream signal at Collins Hill Rd.

SB
Congestion Type: Surveyed Cross Road Signal Queue
Location: SR 316
Frequency: Most Observations
Direction: Westbound
Queue Population: 20 to 60 vpl
Number of Lanes: 2

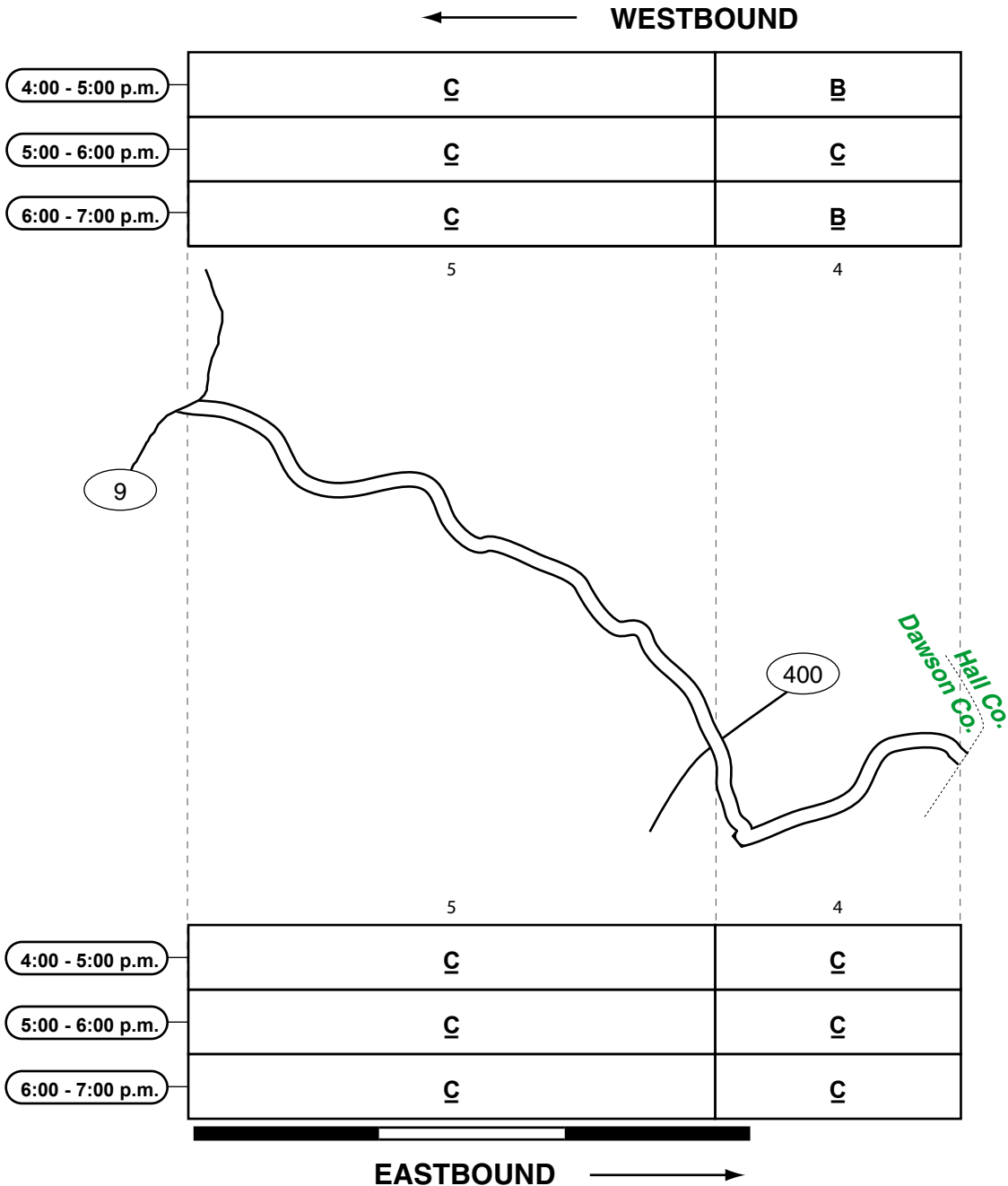


SR 136 (Dawson County) - Morning



Spring 2010

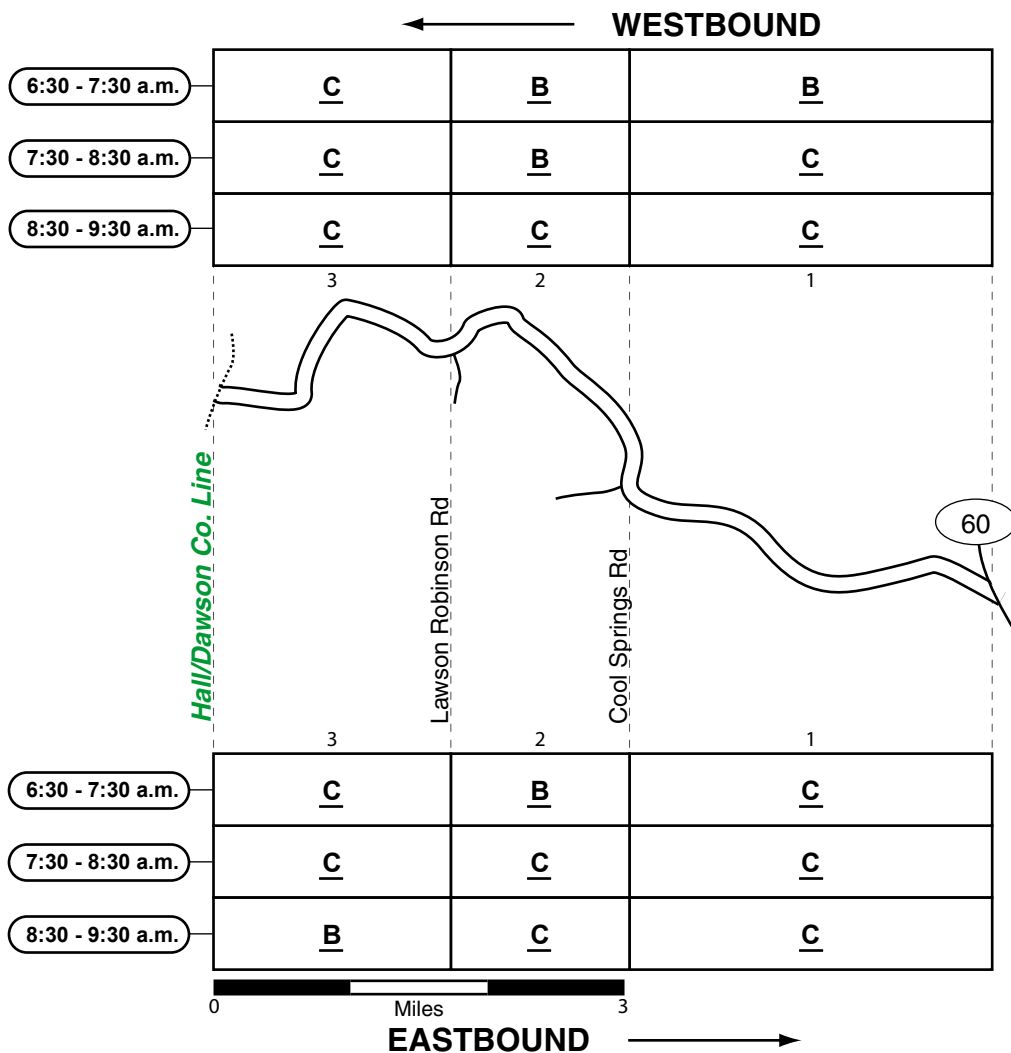
SR 136 (Dawson County) - Evening



Arterial LOS Legend

| A | B | C | D | E | F |
|------------|-------|----------|-------|-----------|--------|
| Very Light | Light | Moderate | Heavy | Congested | Severe |

SR 136 (Hall County) - Morning

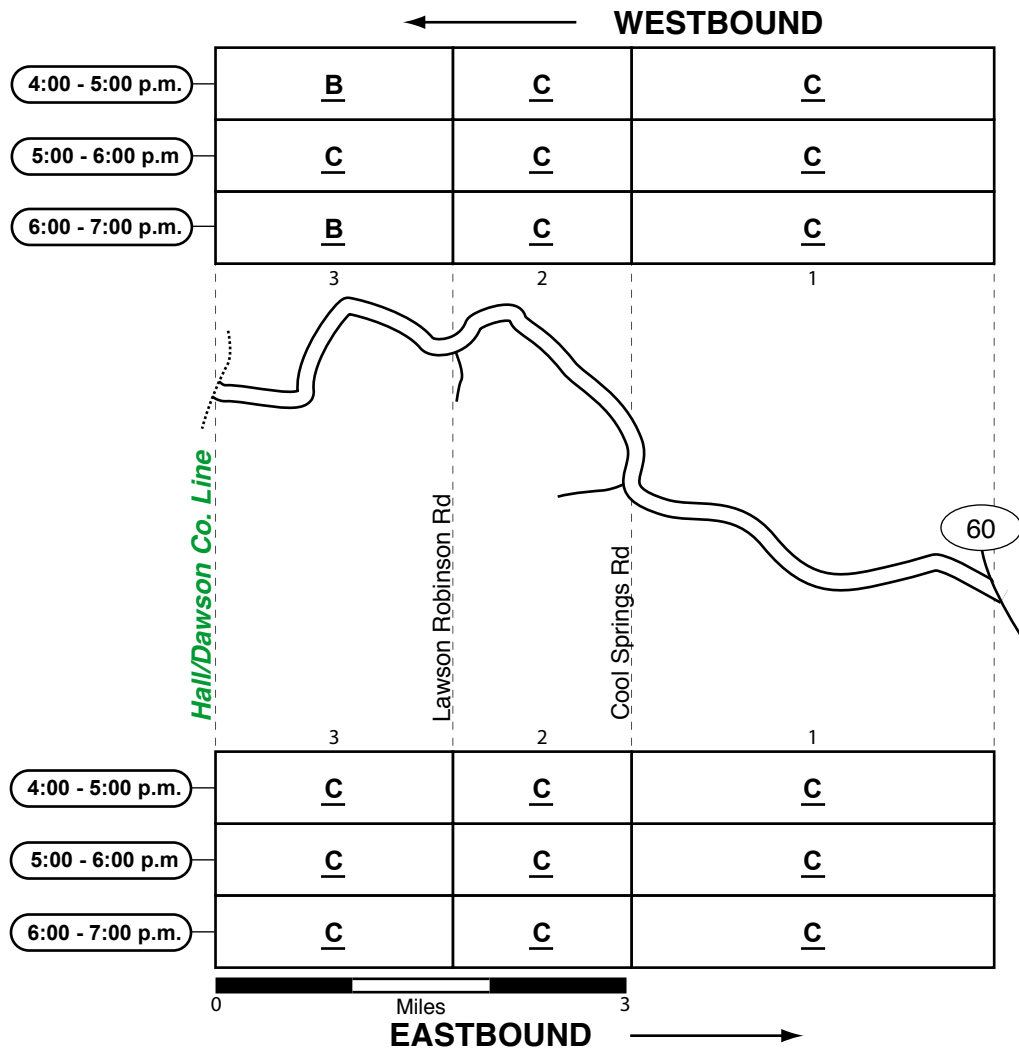


Arterial LOS Legend

| A | B | C | D | E | F |
|------------|-------|----------|-------|-----------|--------|
| Very Light | Light | Moderate | Heavy | Congested | Severe |

Spring 2010

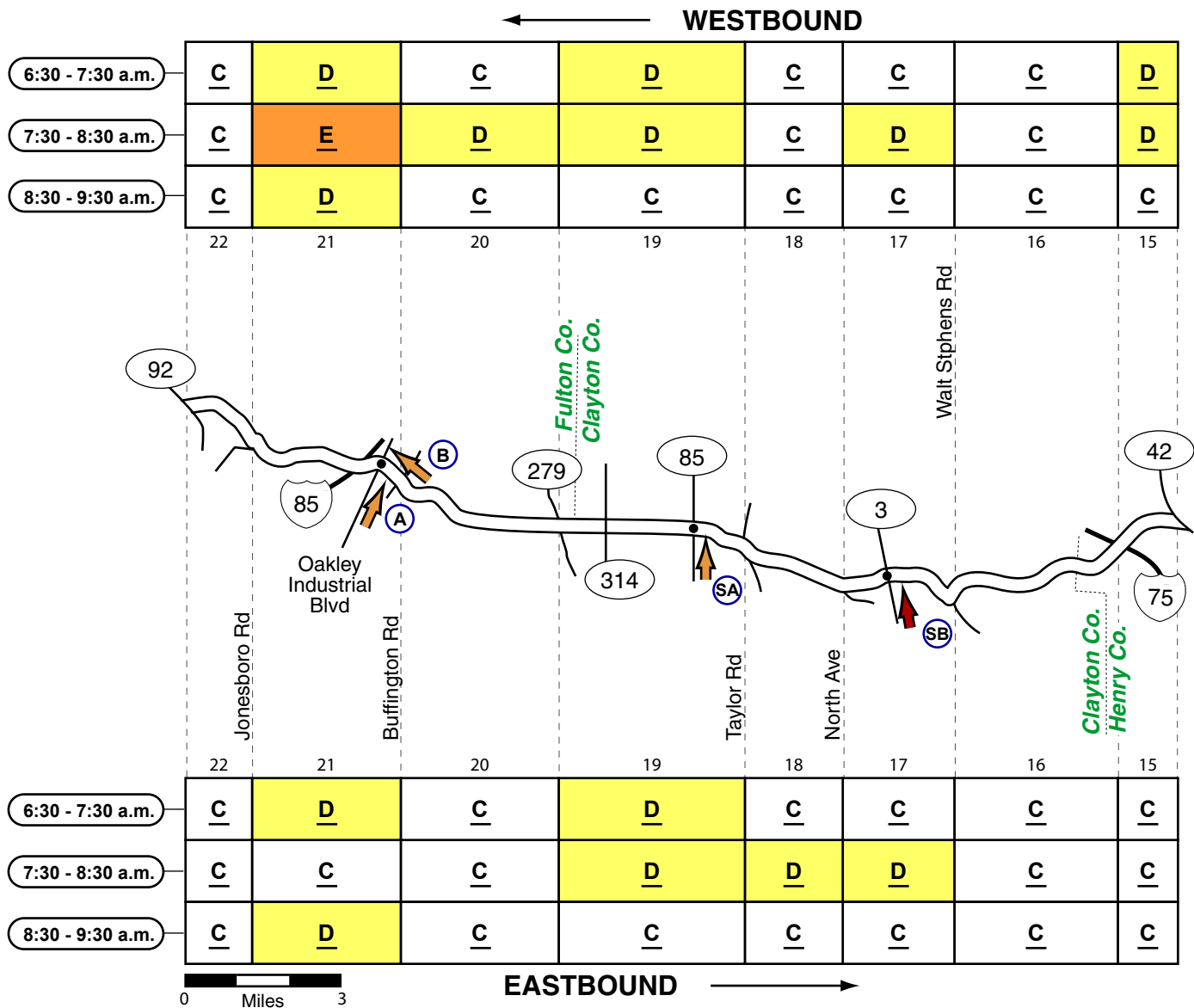
SR 136 (Hall County) - Evening



Arterial LOS Legend

| A | B | C | D | E | F |
|------------|-------|----------|-------|-----------|--------|
| Very Light | Light | Moderate | Heavy | Congested | Severe |

SR 138 (Henry/Clayton & Fulton Counties) - Morning



Arterial LOS Legend

| A | B | C | D | E | F |
|------------|-------|----------|-------|-----------|--------|
| Very Light | Light | Moderate | Heavy | Congested | Severe |

SR 138 (Henry/Clayton & Fulton Counties) - Morning

A

Congestion Type: Cross Road Signal Queue
Location: Oakley Industrial Blvd
Frequency: Intermittent
Direction: Northbound
Queue Population: 20 to 40 vpl
Number of Lanes: 1

B

Congestion Type: Mainline Signal Queue
Location: Oakley Industrial Blvd
Frequency: Intermittent
Direction: Westbound
Queue Population: 20 to 30 vpl
Number of Lanes: 2

SA

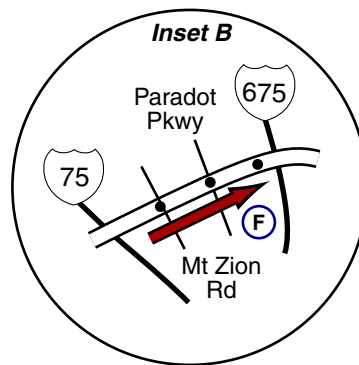
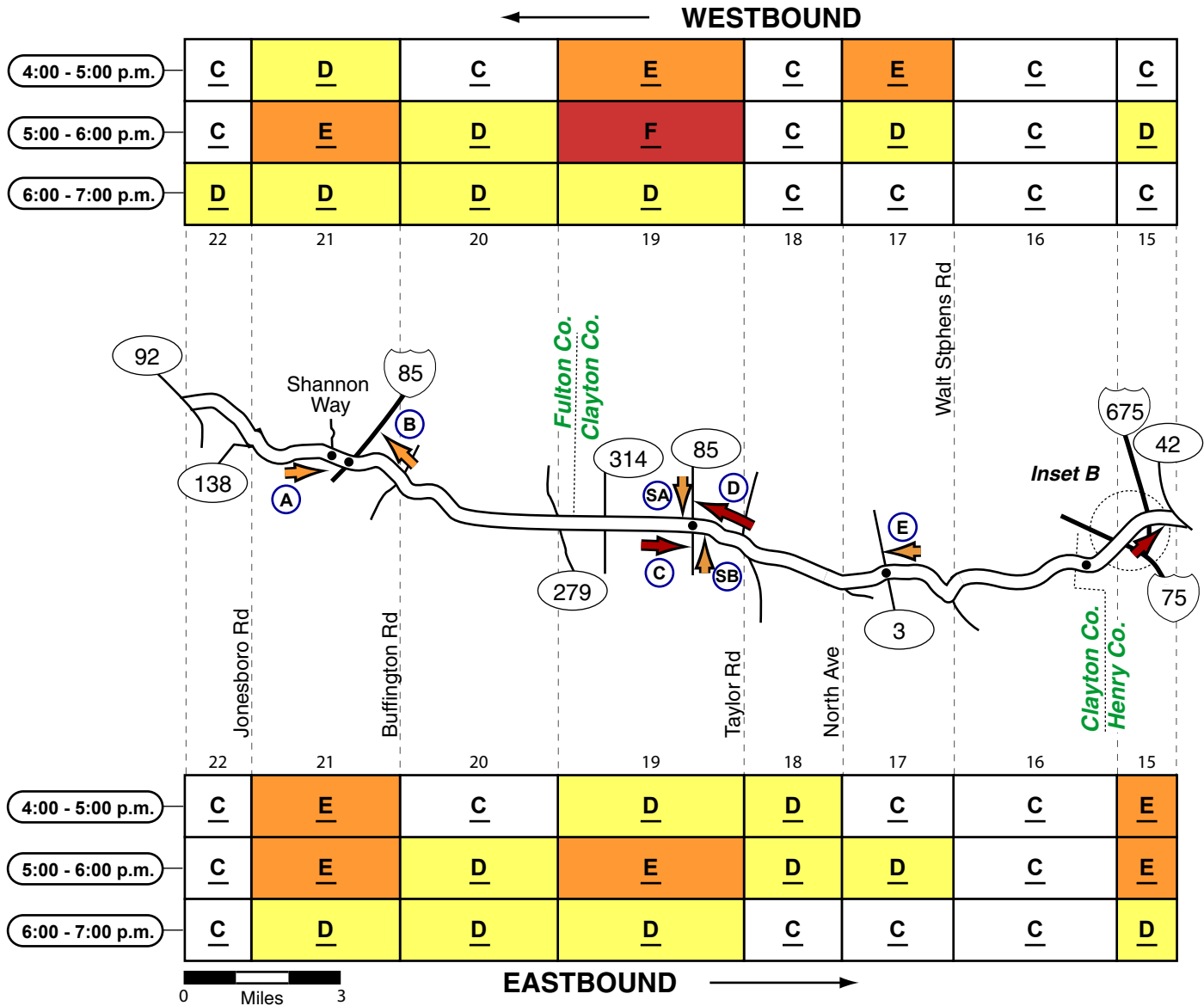
Congestion Type: Surveyed Cross Road Signal Queue
Location: SR 85
Frequency: Intermittent
Direction: Northbound
Queue Population: 20 to 30 vpl
Number of Lanes: 2

Note: On one morning, severe northbound congestion was found on SR 85 approaching the signal at SR 138; congestion extended back through several upstream signals.

SB

Congestion Type: Surveyed Cross Road Signal Queue
Location: SR 3
Frequency: Peak Hour
Direction: Northbound
Queue Population: 20 to 40 vpl
Number of Lanes: 3

SR 138 (Henry/Clayton & Fulton Counties) - Evening



Arterial LOS Legend

| A | B | C | D | E | F |
|------------|-------|----------|-------|-----------|--------|
| Very Light | Light | Moderate | Heavy | Congested | Severe |

SR 138 (Henry/Clayton & Fulton Counties) - Evening**A**

Congestion Type: Mainline Signal Queue
Location: Shannon Way
Frequency: Intermittent
Direction: Eastbound
Queue Population: 20 to 30 vpl
Number of Lanes: 2

SB

Congestion Type: Surveyed Cross Road Signal Queue
Location: SR 85
Frequency: Intermittent
Direction: Northbound
Queue Population: 20 to 25 vpl
Number of Lanes: 2

B

Congestion Type: Mainline Signal Queue
Location: I-85
Frequency: Intermittent
Direction: Westbound
Queue Population: 20 to 40 vpl
Number of Lanes: 2

C

Congestion Type: Mainline Signal Queue
Location: SR 85
Frequency: Most Observations
Direction: Eastbound
Queue Population: 20 to 40 vpl
Number of Lanes: 2

D

Congestion Type: Mainline Signal Queue
Location: SR 85
Frequency: Peak Hour
Direction: Westbound
Queue Population: 20 to 50 vpl
Number of Lanes: 2

E

Congestion Type: Mainline Signal Queue
Location: SR 3
Frequency: Intermittent
Direction: Westbound
Queue Population: 20 to 30 vpl
Number of Lanes: 2

F

Congestion Type: Mainline Signal Queue
Location: I-675
Frequency: Most Observations
Direction: Eastbound
Queue Population: 20 to 60 vpl
Number of Lanes: 2

Note: Eastbound congestion along this section of SR 138 was found at the series of signals between I-75 and I-675 to include (I-675 ramp signals, Paradot Pkwy and Mt Zion Rd).

SA

Congestion Type: Surveyed Cross Road Signal Queue
Location: SR 85
Frequency: Intermittent
Direction: Southbound
Queue Population: 20 to 30 vpl
Number of Lanes: 2



| | | | | | |
|------------|----------|----------|----------|-----------|----------|
| <u>A</u> | <u>B</u> | <u>C</u> | <u>D</u> | <u>E</u> | <u>F</u> |
| Very Light | Light | Moderate | Heavy | Congested | Severe |

SR 138 (Walton/Newton/Rockdale & Henry Counties) - Morning

C

Congestion Type: Mainline Signal Queue
Location: E. Atlanta Rd
Frequency: Intermittent
Direction: Westbound
Queue Population: 20 to 40 vpl
Number of Lanes: 2

D

Congestion Type: Mainline Signal Queue
Location: SR 42
Frequency: Intermittent
Direction: Westbound
Queue Population: 20 to 35 vpl
Number of Lanes: 1

E

Congestion Type: Mainline Signal Queue
Location: SR 155
Frequency: Peak Hour
Direction: Westbound
Queue Population: 25 to 50 vpl
Number of Lanes: 1
Note: It appeared that ongoing construction at the intersection contributed to the congestion.

F

Congestion Type: Mainline Signal Queue
Location: Fairview Rd
Frequency: Peak Hour
Direction: Westbound
Queue Population: 40 to 80 vpl
Number of Lanes: 1
Note: It appeared that the absence of a dedicated left-turn lane contributed to the congestion.

G

Congestion Type: Platoons
Location: Between Granade Rd & SR 20
Frequency: One time only
Direction: Eastbound
Platoon Population: 25 to 30 vpl
Number of Lanes: 1

SA

Congestion Type: Surveyed Cross Road Signal Queue
Location: SR 42
Frequency: Intermittent
Direction: Northbound
Queue Population: 20 to 30 vpl
Number of Lanes: 1

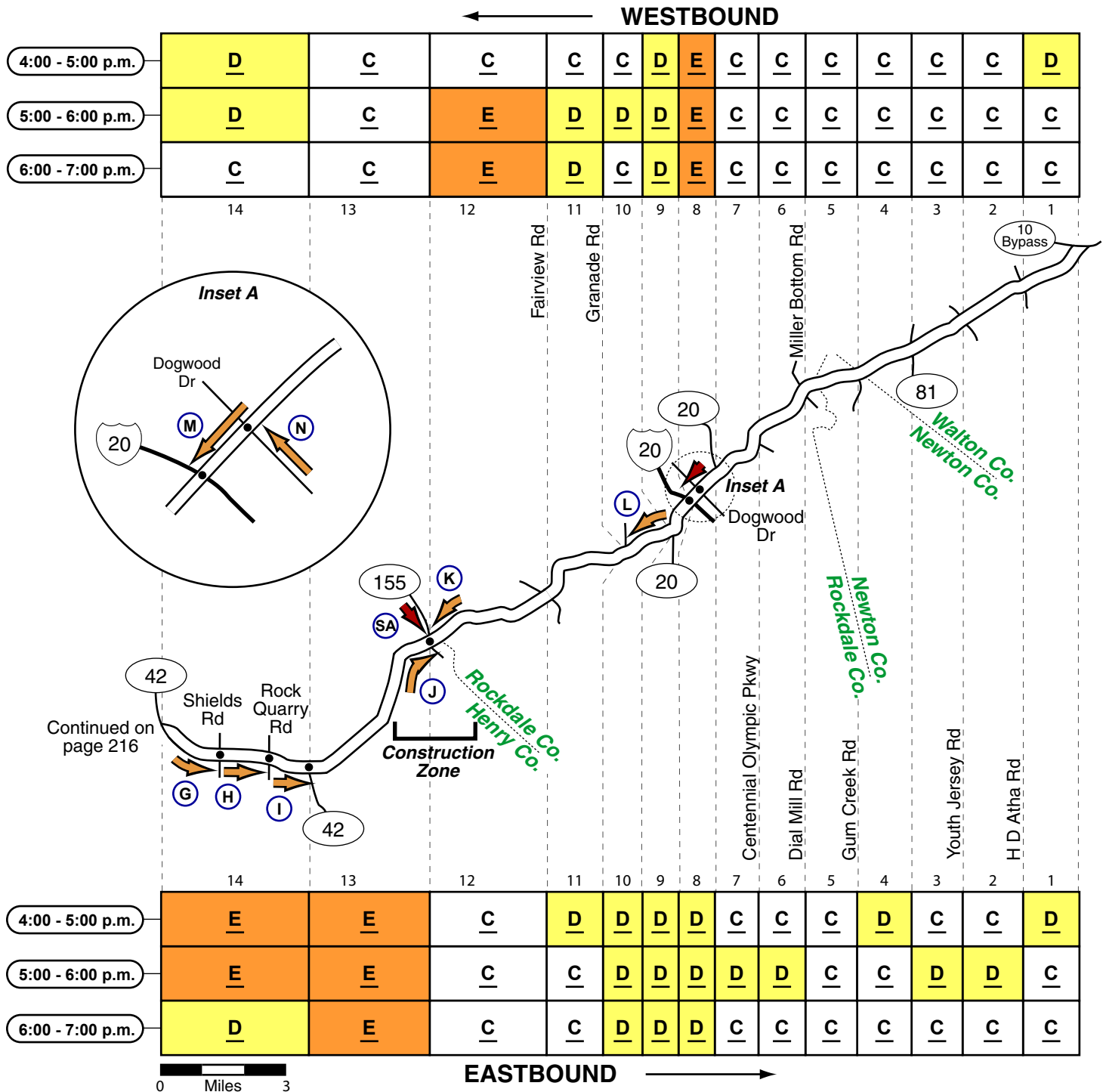
SB

Congestion Type: Surveyed Cross Road Signal Queue
Location: SR 155
Frequency: Intermittent
Direction: Northbound
Queue Population: 20 to 30 vpl
Number of Lanes: 1
Note: Congestion may have been exacerbated by ongoing construction at the intersection.

SC

Congestion Type: Surveyed Cross Road Signal Queue
Location: SR 81
Frequency: Intermittent
Direction: Southbound
Queue Population: 20 to 25 vpl
Number of Lanes: 1

SR 138 (Walton/Newton/Rockdale & Henry Counties) - Evening



SR 138 (Walton/Newton/Rockdale & Henry Counties) - Evening

G

Congestion Type: Mainline Signal Queue
Location: Shields Rd
Frequency: Intermittent
Direction: Eastbound
Queue Population: 20 to 30 vpl
Number of Lanes: 2

H

Congestion Type: Mainline Signal Queue
Location: Rock Quarry Rd
Frequency: Intermittent
Direction: Eastbound
Queue Population: 20 to 30 vpl
Number of Lanes: 2

I

Congestion Type: Mainline Signal Queue
Location: SR 42
Frequency: Intermittent
Direction: Eastbound
Queue Population: 20 to 30 vpl
Number of Lanes: 2

J

Congestion Type: Mainline Signal Queue
Location: SR 155
Frequency: Most Observations
Direction: Eastbound
Queue Population: 20 to 30 vpl
Number of Lanes: 1

K

Congestion Type: Mainline Signal Queue
Location: SR 155
Frequency: Intermittent
Direction: Westbound
Queue Population: 25 to 45 vpl
Number of Lanes: 1
Note: It appeared that ongoing construction at the intersection contributed to the congestion.

L

Congestion Type: Platoons
Location: Between SR 20 & Granade Rd
Frequency: One time only
Direction: Westbound
Platoon Population: 30 to 40 vpl
Number of Lanes: 1

M

Congestion Type: Mainline Signal Queue
Location: I-20
Frequency: Intermittent
Direction: Southbound
Queue Population: 20 to 45 vpl
Number of Lanes: 2
Note: When congested, the queue at I-20 typically extended back through the upstream signal at Dogwood Dr.

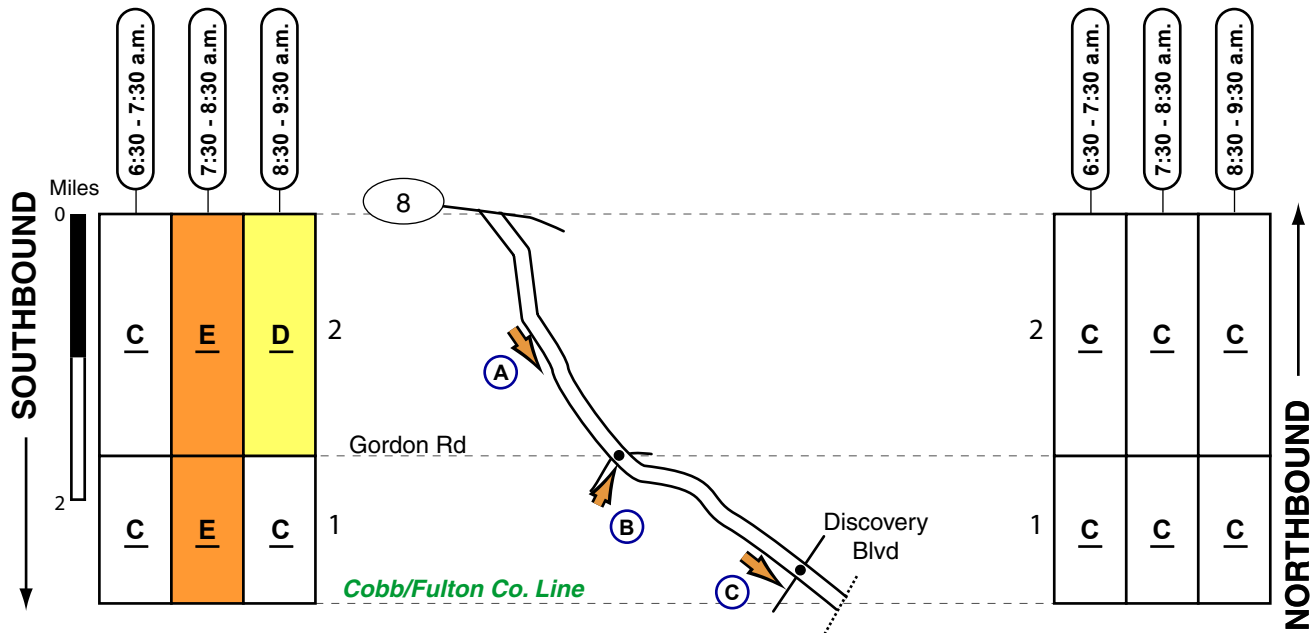
N

Congestion Type: Cross Road Signal Queue
Location: Dogwood Dr
Frequency: Intermittent
Direction: Westbound
Queue Population: 20 to 30 vpl
Number of Lanes: 2
Note: When congested, vehicles were queued in the two dedicated left-turn lanes.

SA

Congestion Type: Surveyed Cross Road Signal Queue
Location: SR 155
Frequency: Peak Hour
Direction: Southbound
Queue Population: 20 to 40 vpl
Number of Lanes: 1

SR 139 (Cobb County) - Morning



A
Congestion Type: Platoons
Location: Between SR 8 & Gordon Rd
Frequency: Intermittent
Direction: Southbound
Platoon Population: 25 to 30 vpl
Number of Lanes: 2

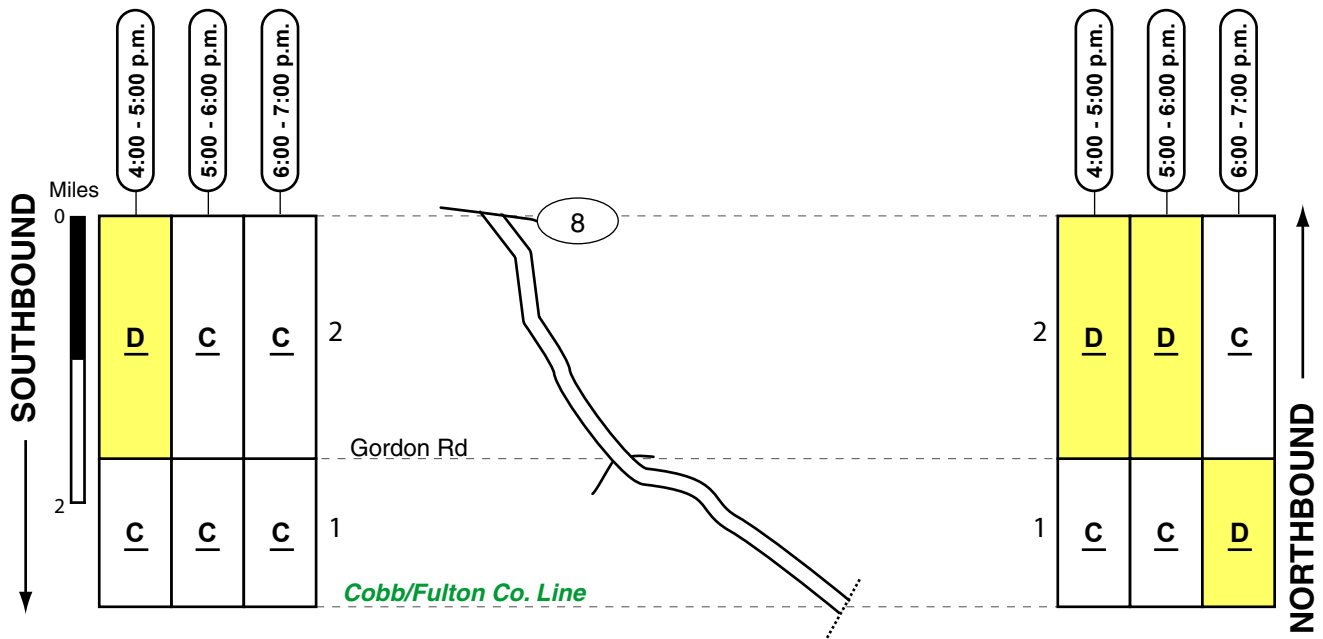
B
Congestion Type: Cross Road Signal Queue
Location: Gordon Rd
Frequency: Intermittent
Direction: Eastbound
Queue Population: 20 to 25 vpl
Number of Lanes: 1

C
Congestion Type: Mainline Signal Queue
Location: Discovery Blvd
Frequency: Intermittent
Direction: Southbound
Queue Population: 20 to 30 vpl
Number of Lanes: 2

Arterial LOS Legend

| A | B | C | D | E | F |
|------------|-------|----------|-------|-----------|--------|
| Very Light | Light | Moderate | Heavy | Congested | Severe |

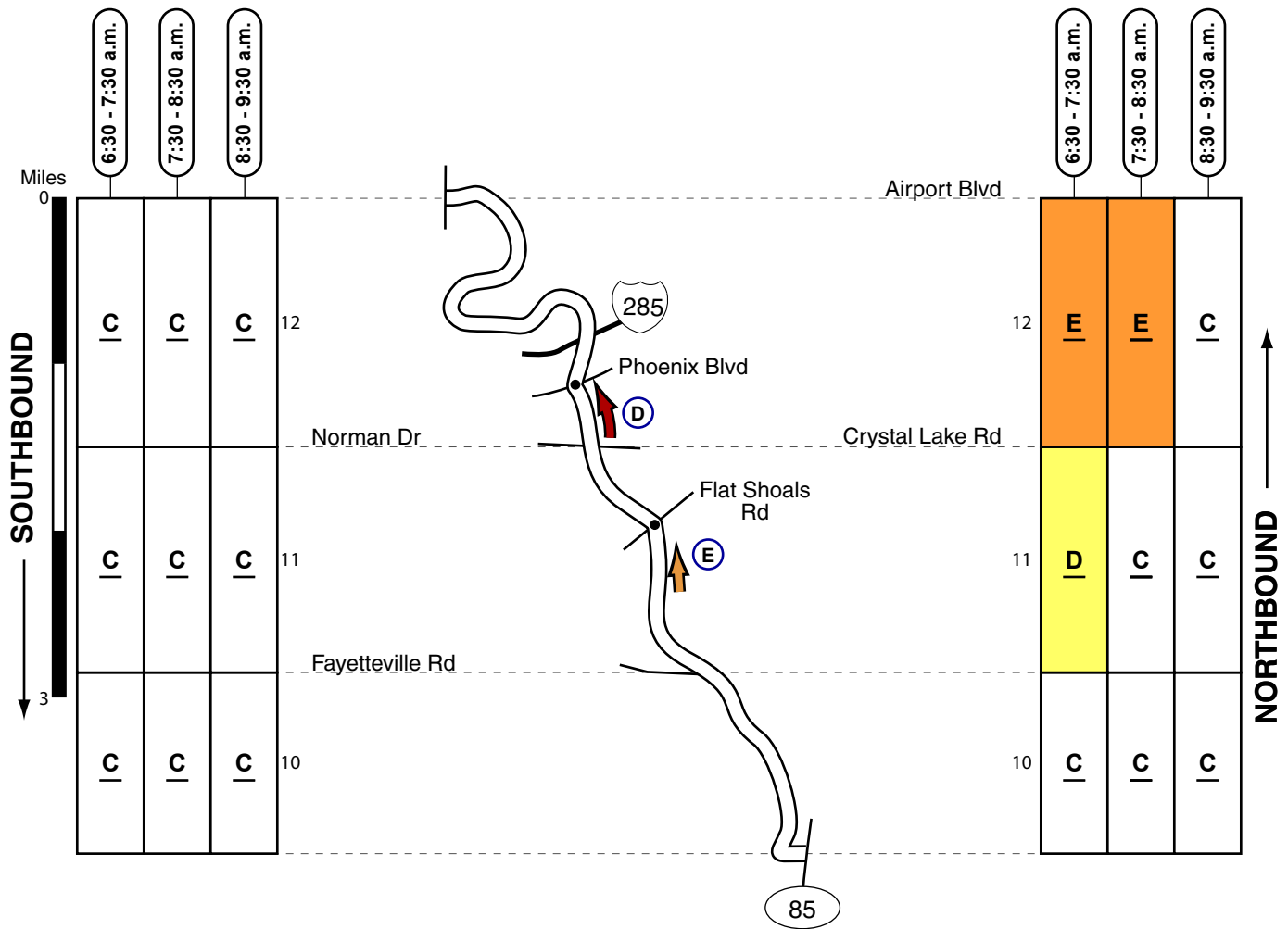
Spring 2010 SR 139 (Cobb County) - Evening



Arterial LOS Legend

| A | B | C | D | E | F |
|------------|-------|----------|-------|-----------|--------|
| Very Light | Light | Moderate | Heavy | Congested | Severe |

SR 139 (Clayton County) - Morning



D

Congestion Type: Mainline Signal Queue

Location: Phoenix Blvd

Frequency: Peak Hour

Direction: Northbound

Queue Population: 20 to 40 vpl

Number of Lanes: 2

Note: During some observations, congestion was found downstream of Phoenix Blvd approaching the signal at the I-285 eastbound ramps.

E

Congestion Type: Platoons

Location: vicinity of Flat Shoals Rd

Frequency: Intermittent

Direction: Northbound

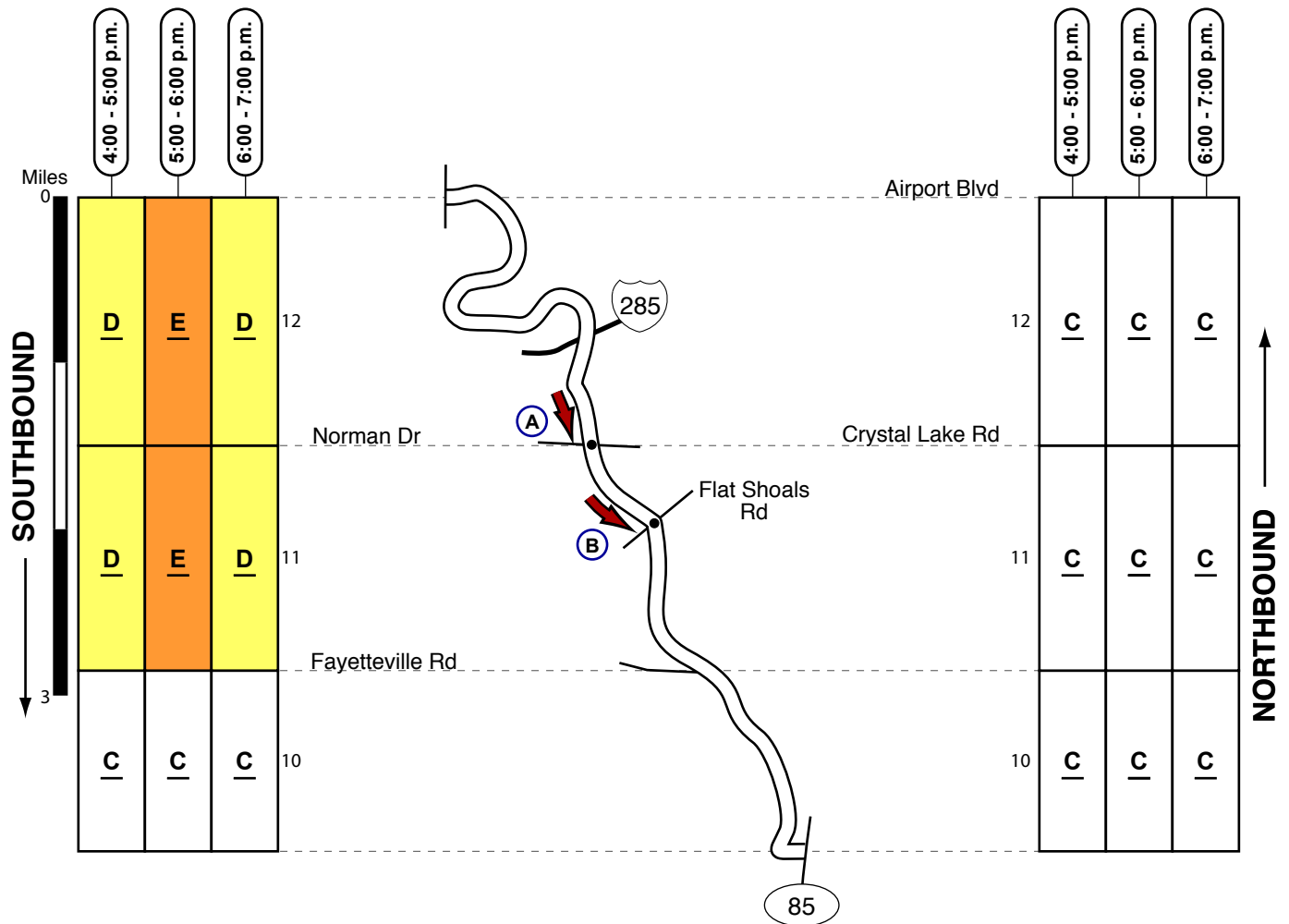
Platoon Population: 25 to 30 vpl

Number of Lanes: 2

Arterial LOS Legend

| A | B | C | D | E | F |
|------------|-------|----------|-------|-----------|--------|
| Very Light | Light | Moderate | Heavy | Congested | Severe |

SR 139 (Clayton County) - Evening



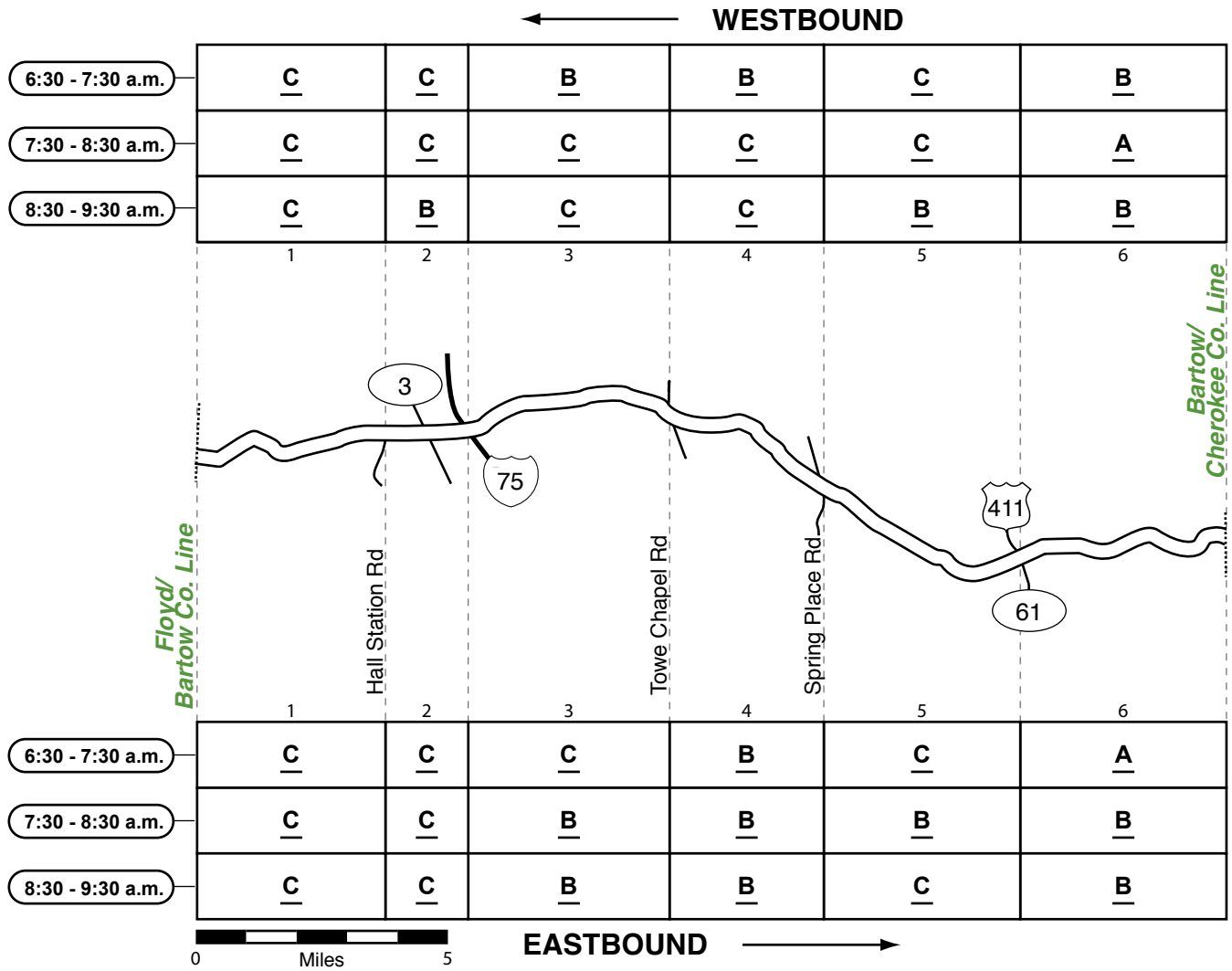
A
 Congestion Type: Mainline Signal Queue
 Location: Norman Dr
 Frequency: Peak Hour
 Direction: Southbound
 Queue Population: 20 to 30 vpl
 Number of Lanes: 2

B
 Congestion Type: Mainline Signal Queue
 Location: Flat Shoals Rd
 Frequency: Peak Hour
 Direction: Southbound
 Queue Population: 20 to 30 vpl
 Number of Lanes: 2

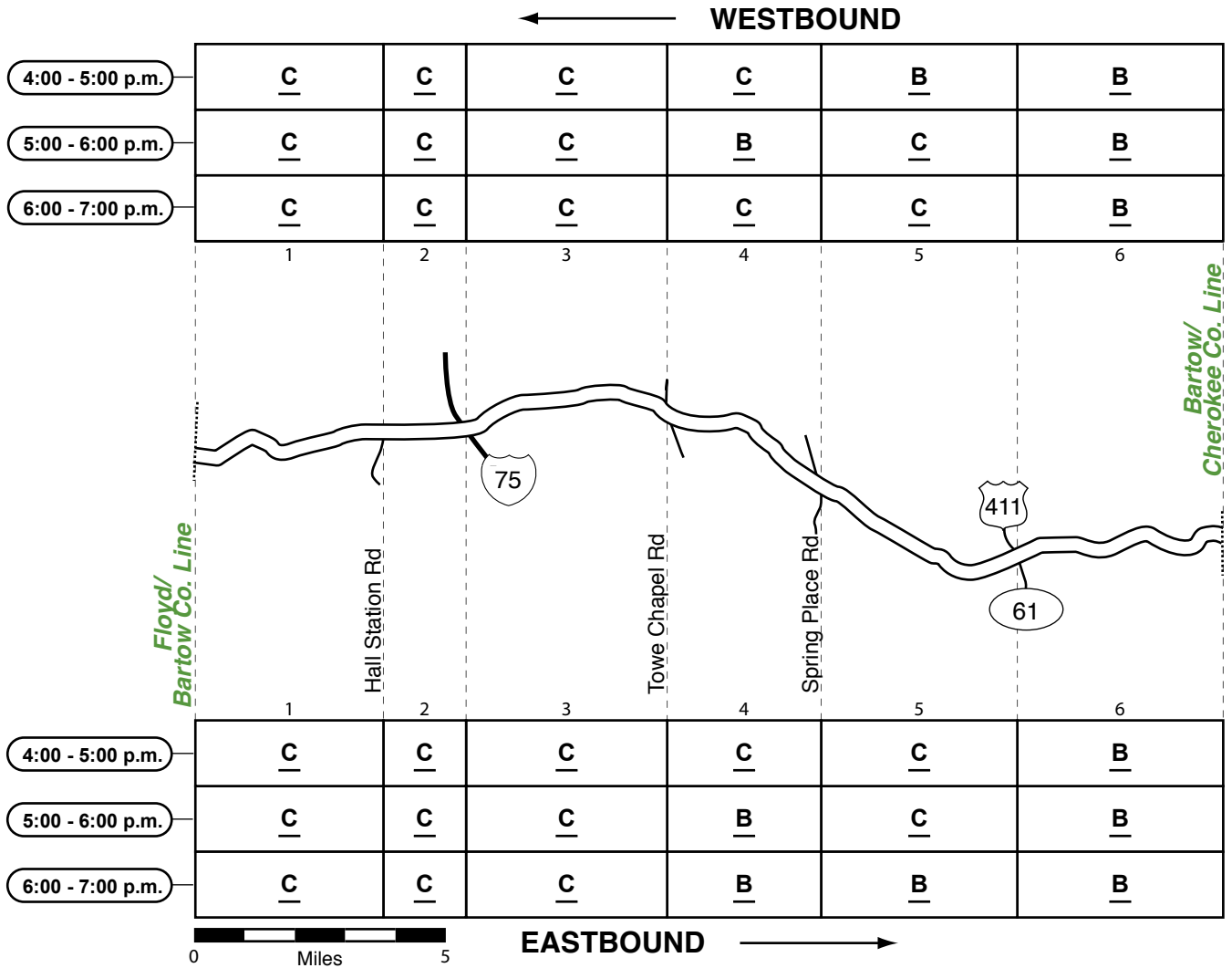
Arterial LOS Legend

| A | B | C | D | E | F |
|------------|-------|----------|-------|-----------|--------|
| Very Light | Light | Moderate | Heavy | Congested | Severe |

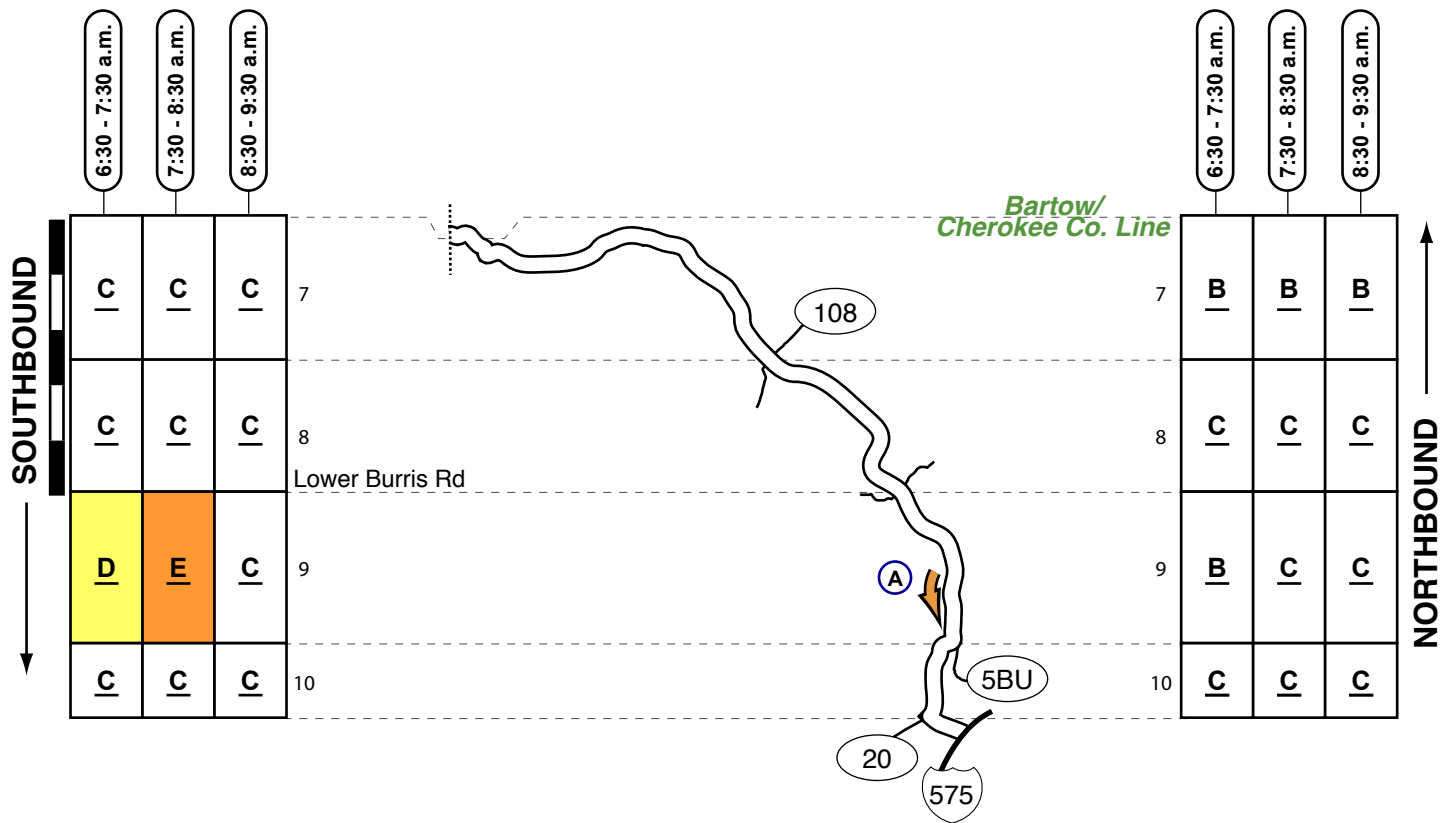
SR 140 (Bartow County) - Morning



SR 140 (Bartow County) - Evening



SR 140 (Cherokee County) - Morning



A

Congestion Type: Platoons

Location: Between Lower Burns Rd & SR 5BU

Frequency: Intermittent

Direction: Southbound

Platoon Population: 25 to 35 vpl

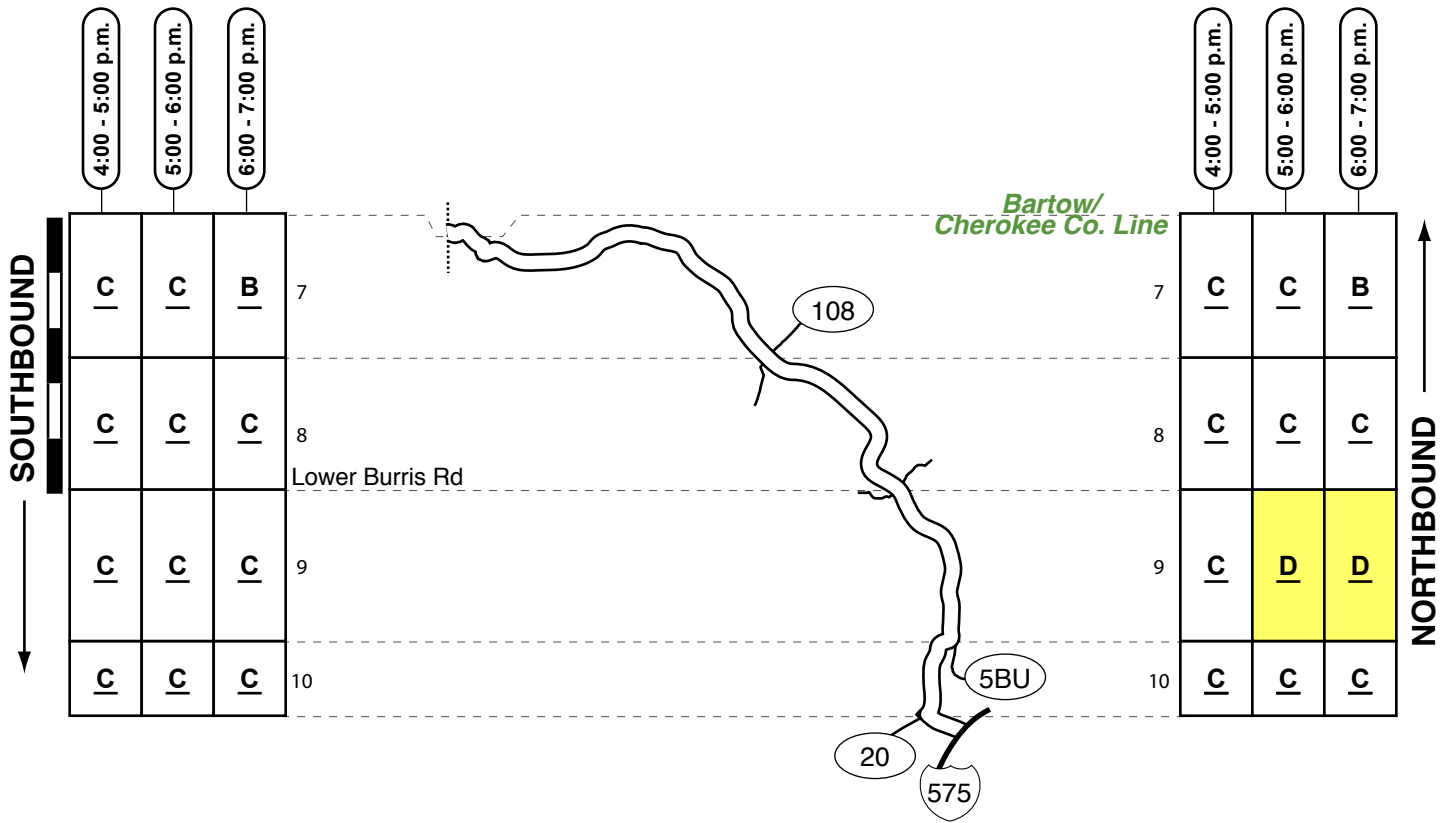
Number of Lanes: 1

Arterial LOS Legend

| A | B | C | D | E | F |
|------------|-------|----------|-------|-----------|--------|
| Very Light | Light | Moderate | Heavy | Congested | Severe |

Spring 2010

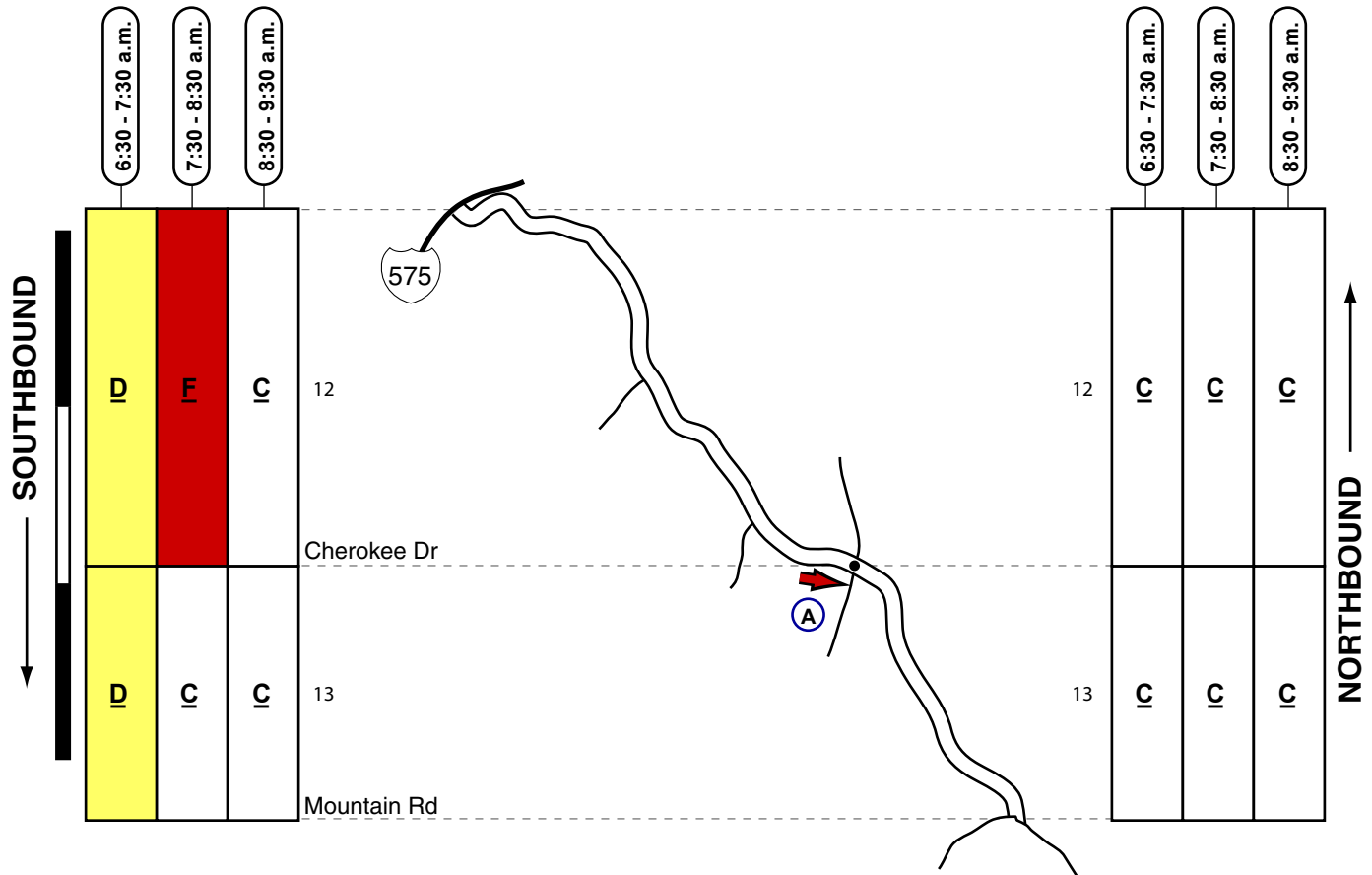
SR 140 (Cherokee County) - Evening



Arterial LOS Legend

| A | B | C | D | E | F |
|------------|-------|----------|-------|-----------|--------|
| Very Light | Light | Moderate | Heavy | Congested | Severe |

SR 140 (Cherokee County) - Morning

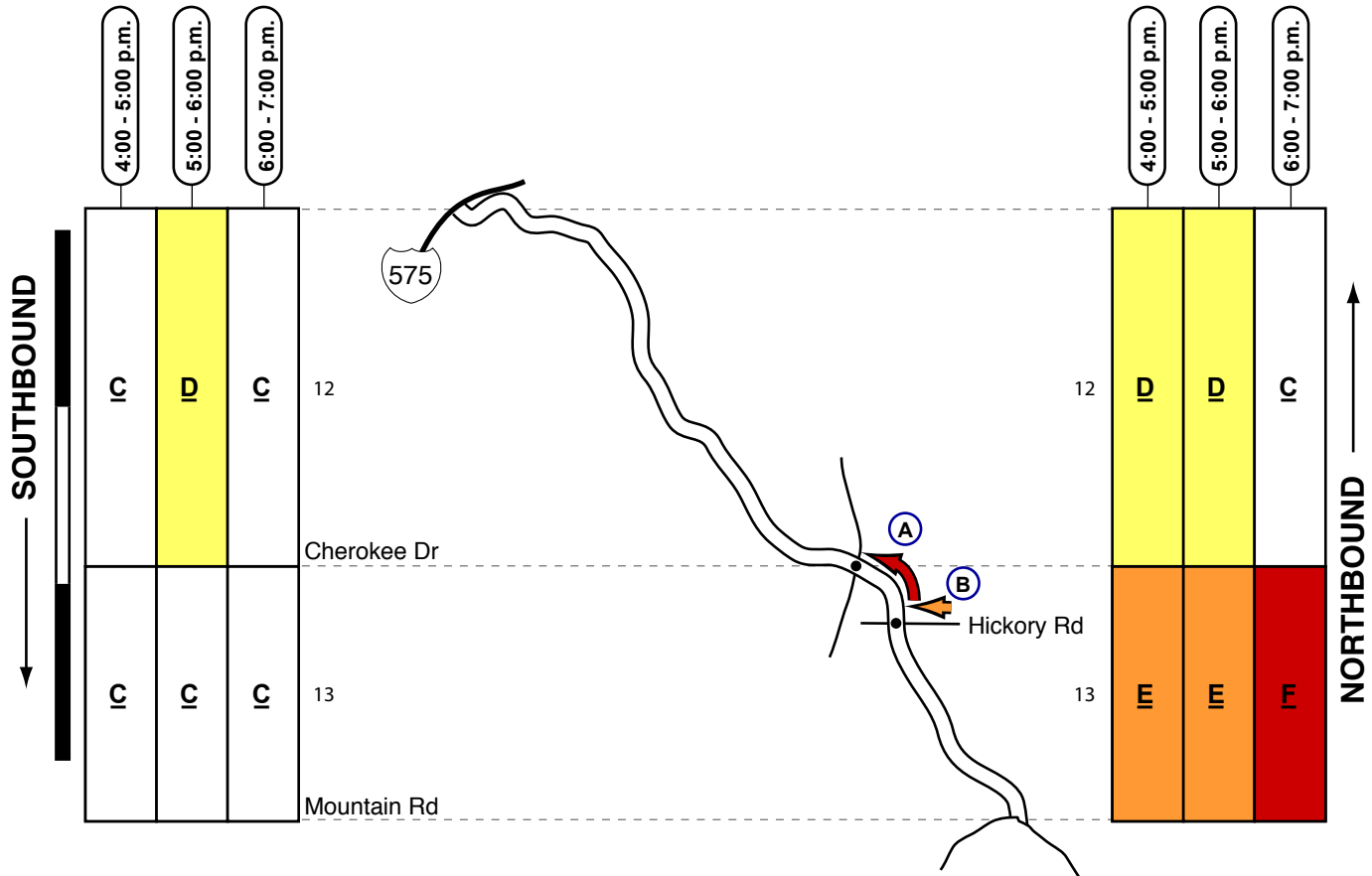


A
Congestion Type: Mainline Signal Queue
Location: Cherokee Dr
Frequency: Peak Hour
Direction: Southbound
Queue Population: 20 to 60 vpl
Number of Lanes: 1

Arterial LOS Legend

| A | B | C | D | E | F |
|------------|-------|----------|-------|-----------|--------|
| Very Light | Light | Moderate | Heavy | Congested | Severe |

SR 140 (Cherokee County) - Evening



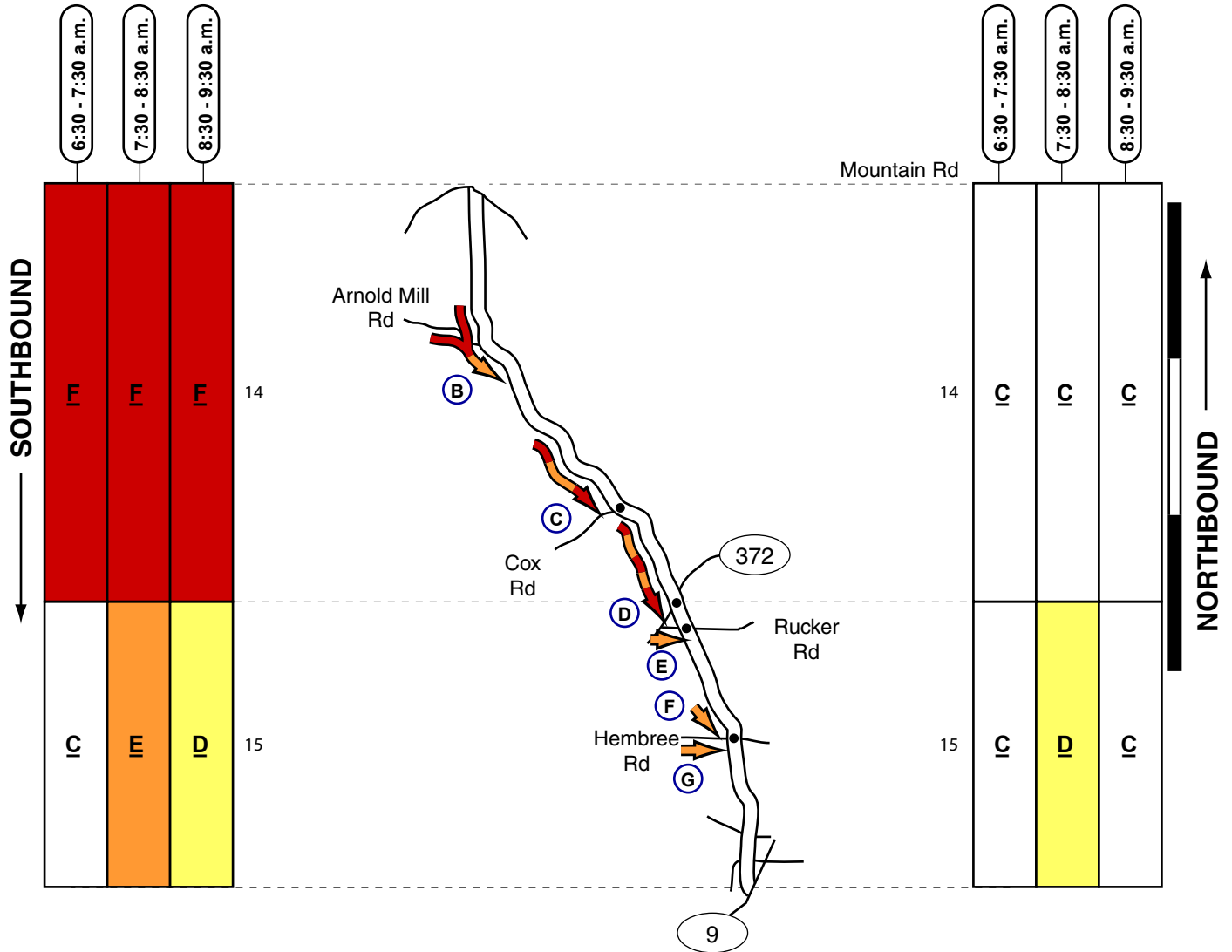
A
 Congestion Type: Mainline Signal Queue
 Location: Cherokee Dr
 Frequency: Most Observations
 Direction: Northbound
 Queue Population: 20 to 60 vpl
 Number of Lanes: 1

B
 Congestion Type: Cross Road Signal Queue
 Location: Hickory Rd
 Frequency: Intermittent
 Direction: Westbound
 Queue Population: 20 to 35 vpl
 Number of Lanes: 1

Arterial LOS Legend

| A | B | C | D | E | F |
|------------|-------|----------|-------|-----------|--------|
| Very Light | Light | Moderate | Heavy | Congested | Severe |

SR 140 (Fulton County) - Morning



SR 140 (Fulton County) - Morning

B

Congestion Type: Mainline Queue

Location: Arnold Mill Rd

Frequency: Peak Hour

Direction: Southbound

Queue Population: 20 to 80 vpl

Number of Lanes: 1

Note: Congestion appeared to be caused by traffic merging into the mainline from Arnold Mill Rd (no signal); downstream congestion on SR 140 may also have contributed to the congestion at Arnold Mill Rd.

C

Congestion Type: Mainline Signal Queue

Location: Cox Rd

Frequency: Most Observations

Direction: Southbound

Queue Population: 20 to 80 vpl

Number of Lanes: 1

D

Congestion Type: Mainline Signal Queue

Location: SR 372

Frequency: Most Observations

Direction: Southbound

Queue Population: 20 to 80 vpl

Number of Lanes: 1

E

Congestion Type: Cross Road Signal Queue

Location: Rucker Rd

Frequency: Intermittent

Direction: Eastbound

Queue Population: 20 to 25 vpl

Number of Lanes: 1

F

Congestion Type: Mainline Signal Queue

Location: Hembree Rd

Frequency: Intermittent

Direction: Southbound

Queue Population: 20 to 40 vpl

Number of Lanes: 1

G

Congestion Type: Cross Road Signal Queue

Location: Hembree Rd

Frequency: Intermittent

Direction: Eastbound

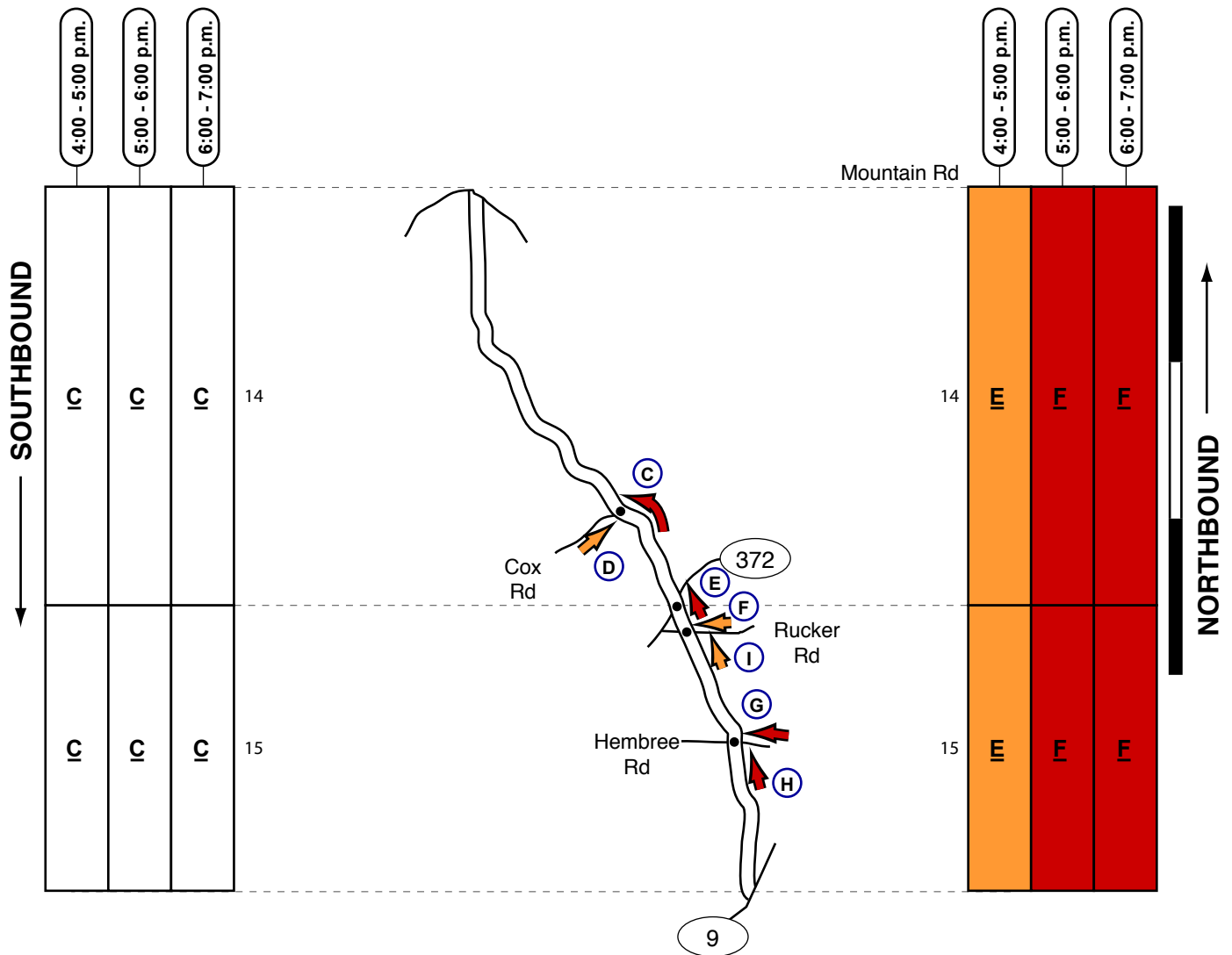
Queue Population: 20 to 30 vpl

Number of Lanes: 1

Arterial LOS Legend

| A | B | C | D | E | F |
|------------|-------|----------|-------|-----------|--------|
| Very Light | Light | Moderate | Heavy | Congested | Severe |

SR 140 (Fulton County) - Evening



Arterial LOS Legend

| A | B | C | D | E | F |
|------------|-------|----------|-------|-----------|--------|
| Very Light | Light | Moderate | Heavy | Congested | Severe |

SR 140 (Fulton County) - Evening

C

Congestion Type: Mainline Signal Queue

Location: Cox Rd

Frequency: Most Observations

Direction: Northbound

Queue Population: 20 to 60 vpl

Number of Lanes: 1

D

Congestion Type: Cross Road Signal Queue

Location: Cox Rd

Frequency: Intermittent

Direction: Eastbound

Queue Population: 20 to 30 vpl

Number of Lanes: 1

E

Congestion Type: Mainline Signal Queue

Location: SR 372 (Crabapple Rd)

Frequency: Most Observations

Direction: Northbound

Queue Population: 20 to 40 vpl

Number of Lanes: 1

F

Congestion Type: Cross Road Signal Queue

Location: Rucker Rd

Frequency: Intermittent

Direction: Westbound

Queue Population: 20 to 30 vpl

Number of Lanes: 1

G

Congestion Type: Cross Road Signal Queue

Location: Hembree Rd

Frequency: Most Observations

Direction: Westbound

Queue Population: 20 to 60 vpl

Number of Lanes: 1

H

Congestion Type: Mainline Signal Queue

Location: Hembree Rd

Frequency: Most Observations

Direction: Northbound

Queue Population: 20 to 60 vpl

Number of Lanes: 1

I

Congestion Type: Mainline Signal Queue

Location: Rucker Rd

Frequency: Intermittent

Direction: Northbound

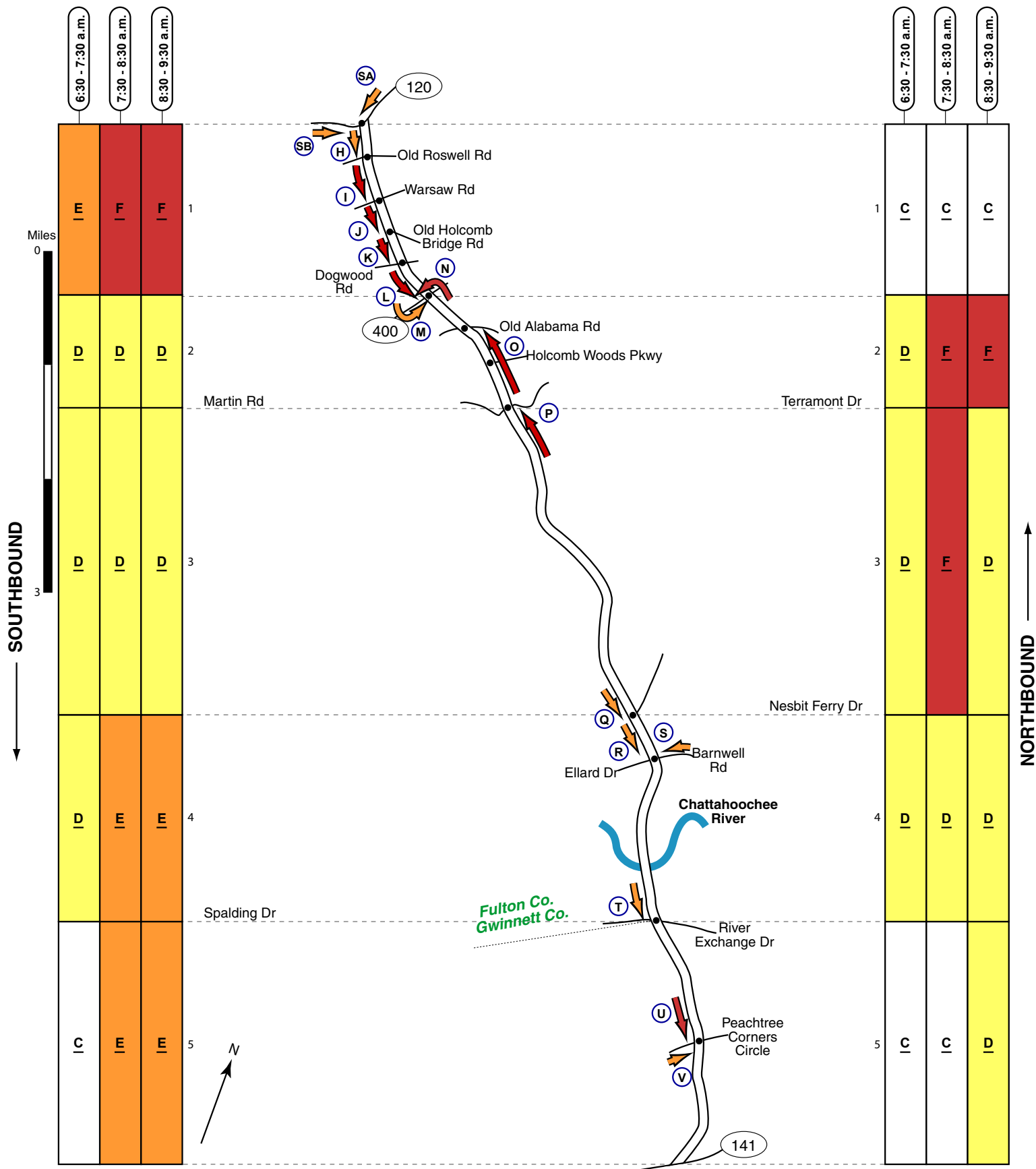
Queue Population: 20 to 35 vpl

Number of Lanes: 1

Arterial LOS Legend

| A | B | C | D | E | F |
|------------|-------|----------|-------|-----------|--------|
| Very Light | Light | Moderate | Heavy | Congested | Severe |

SR 140 (Fulton & Gwinnett Counties) - Morning



SR 140 (Fulton & Gwinnett Counties) - Morning

H

Congestion Type: Mainline Signal Queue
Location: Old Roswell Rd
Frequency: Intermittent
Direction: Southbound
Queue Population: 20 to 25 vpl
Number of Lanes: 3

I

Congestion Type: Mainline Signal Queue
Location: Warsaw Rd
Frequency: Peak Hour
Direction: Southbound
Queue Population: 20 to 40 vpl
Number of Lanes: 3
Note: During some observations, congestion at Warsaw Rd appeared to be exacerbated by downstream congestion on SR 140.

J

Congestion Type: Mainline Signal Queue
Location: Old Holcomb Bridge Rd
Frequency: Most Observations
Direction: Southbound
Queue Population: 20 to 50 vpl
Number of Lanes: 3
Note: During some observations, southbound congestion approaching Old Holcomb Bridge Rd extended back through the upstream signal at Warsaw Rd.

K

Congestion Type: Mainline Signal Queue
Location: Dogwood Rd
Frequency: Most Observations
Direction: Southbound
Queue Population: 20 to 60 vpl
Number of Lanes: 3
Note: During the peak period, southbound congestion approaching Dogwood Rd often extended back through one or more upstream signal.

L

Congestion Type: Mainline Signal Queue
Location: SR 400
Frequency: Most Observations
Direction: Southbound
Queue Population: 20 to 60 vpl
Number of Lanes: 2
Note: During the peak period, southbound congestion approaching SR 400 often extended back through one or more upstream signal.

M

Congestion Type: Left-Turn Queue
Location: SR 400
Frequency: Most Observations
Direction: Northbound
Queue Population: 20 to 30 vpl
Number of Lanes: 2
Note: When congested, vehicles were queued in the two dedicated left-turn lanes waiting to turn onto the SR 400 southbound ramp.

N

Congestion Type: Left-Turn Queue
Location: SR 400
Frequency: Intermittent
Direction: Southbound
Queue Population: 20 to 30 vpl
Number of Lanes: 1
Note: When congested, vehicles were queued in the dedicated left turn lane waiting to turn onto the SR 400 northbound ramp.

O

Congestion Type: Mainline Signal Queue
Location: Old Alabama Rd
Frequency: Most Observations
Direction: Northbound
Queue Population: 20 to 100 vpl
Number of Lanes: 2
Note: During the peak period, northbound congestion at Old Alabama Rd typically extended back through the upstream signals at Holcomb Woods Pkwy and Terramont Dr.

P

Congestion Type: Mainline Signal Queue
Location: Terramont Dr
Frequency: Peak Hour
Direction: Northbound
Queue Population: 20 to 50 vpl
Number of Lanes: 2
Note: During some observations, northbound congestion at Terramont Dr appeared to be exacerbated by downstream congestion backing through the signal.

Q

Congestion Type: Mainline Signal Queue
Location: Nesbit Ferry Rd
Frequency: Intermittent
Direction: Southbound
Queue Population: 20 to 30 vpl
Number of Lanes: 2

R

Congestion Type: Mainline Signal Queue
Location: Barnwell Rd/Ellard Dr
Frequency: Intermittent
Direction: Southbound
Queue Population: 20 to 30 vpl
Number of Lanes: 2

S

Congestion Type: Cross Road Signal Queue
Location: Barnwell Rd
Frequency: Intermittent
Direction: Westbound
Queue Population: 20 to 25 vpl
Number of Lanes: 2

T

Congestion Type: Mainline Signal Queue
Location: Spalding Dr
Frequency: Intermittent
Direction: Southbound
Queue Population: 20 to 30 vpl
Number of Lanes: 2
Note: Intermittently, congestion was found in the left-turn bay at the signal at Spalding Dr.

U

Congestion Type: Mainline Signal Queue
Location: Peachtree Corners Circle
Frequency: Most Observations
Direction: Southbound
Queue Population: 20 to 40 vpl
Number of Lanes: 2

V

Congestion Type: Cross Road Signal Queue
Location: Peachtree Corners Circle
Frequency: Intermittent
Direction: Eastbound
Queue Population: 20 to 25 vpl
Number of Lanes: 1
Note: When congested, vehicles were queued in the left turn bay waiting to turn northbound on SR 140.

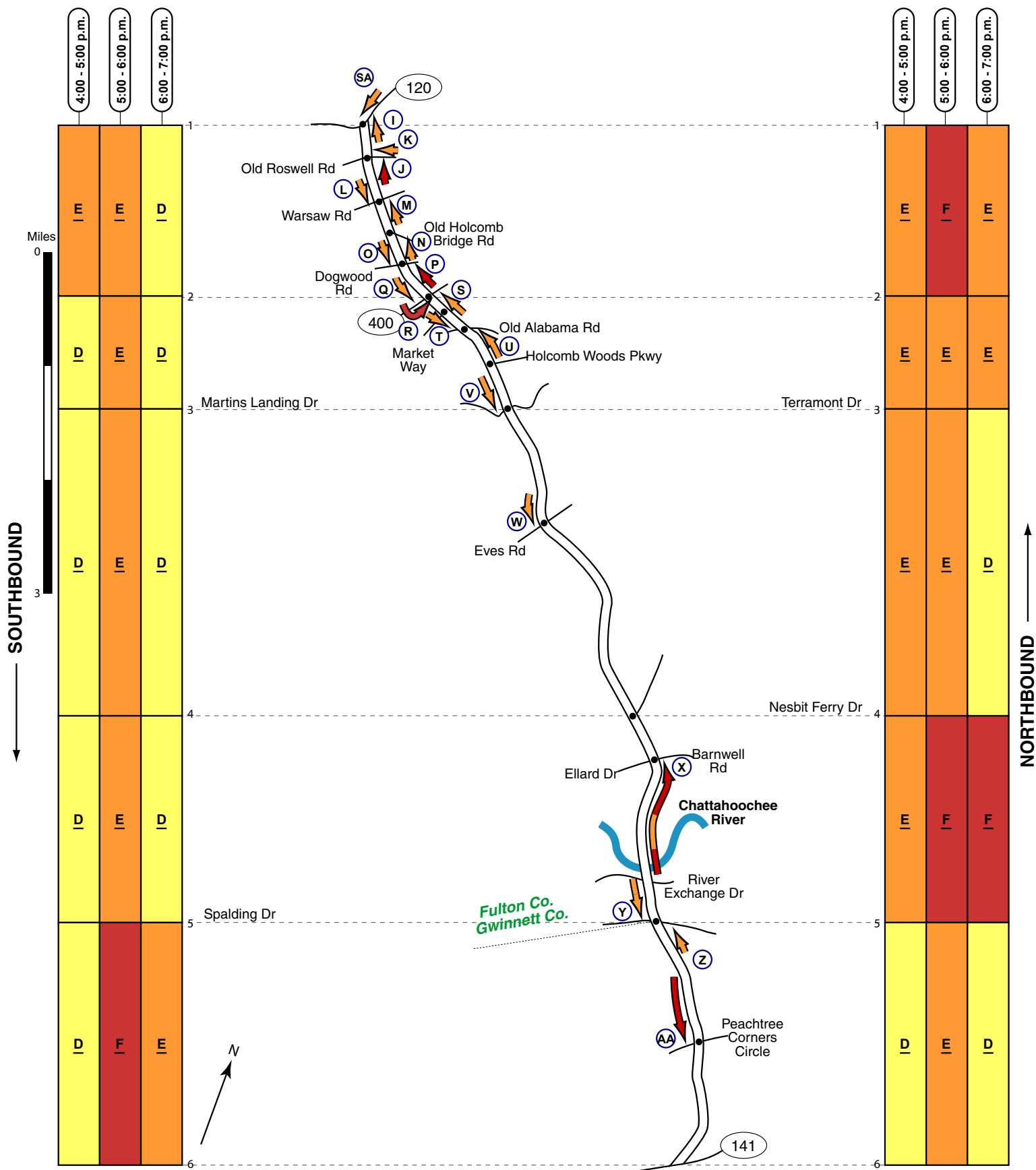
SA

Congestion Type: Surveyed Cross Road Signal Queue
Location: SR 120
Frequency: Intermittent
Direction: Southbound
Queue Population: 20 to 25 vpl
Number of Lanes: 2

SB

Congestion Type: Surveyed Cross Road Signal Queue
Location: SR 120
Frequency: Intermittent
Direction: Northbound
Queue Population: 20 to 25 vpl
Number of Lanes: 2

SR 140 (Fulton & Gwinnett Counties) - Evening



SR 140 (Fulton & Gwinnett Counties) - Evening

I
Congestion Type: Mainline Signal Queue
Location: SR 120
Frequency: Intermittent
Direction: Northbound
Queue Population: 20 to 30 vpl
Number of Lanes: 3

J
Congestion Type: Mainline Signal Queue
Location: Old Roswell Rd
Frequency: Most Observations
Direction: Northbound
Queue Population: 20 to 50 vpl
Number of Lanes: 3

K
Congestion Type: Cross Road Signal Queue
Location: Old Roswell Rd
Frequency: Intermittent
Direction: Westbound
Queue Population: 20 to 40 vpl
Number of Lanes: 1

L
Congestion Type: Mainline Signal Queue
Location: Warsaw Rd
Frequency: Intermittent
Direction: Southbound
Queue Population: 20 to 30 vpl
Number of Lanes: 3

M
Congestion Type: Mainline Signal Queue
Location: Warsaw Rd
Frequency: Intermittent
Direction: Northbound
Queue Population: 20 to 30 vpl
Number of Lanes: 3

N
Congestion Type: Mainline Signal Queue
Location: Old Holcomb Bridge Rd
Frequency: Intermittent
Direction: Northbound
Queue Population: 20 to 30 vpl
Number of Lanes: 3

O
Congestion Type: Mainline Signal Queue
Location: Dogwood Rd
Frequency: Intermittent
Direction: Southbound
Queue Population: 20 to 30 vpl
Number of Lanes: 3

P
Congestion Type: Mainline Signal Queue
Location: Dogwood Rd
Frequency: Peak Hour
Direction: Northbound
Queue Population: 20 to 40 vpl
Number of Lanes: 3

Q
Congestion Type: Mainline Signal Queue
Location: SR 400
Frequency: Intermittent
Direction: Southbound
Queue Population: 20 to 40 vpl
Number of Lanes: 2

R
Congestion Type: Left-Turn Queue
Location: SR 400
Frequency: Most Observations
Direction: Southbound
Queue Population: 20 to 25 vpl
Number of Lanes: 1
Note: When congested, vehicles were queued in the dedicated left turn lane waiting to turn onto the SR 400 northbound ramp.

S
Congestion Type: Mainline Signal Queue
Location: SR 400
Frequency: Intermittent
Direction: Northbound
Queue Population: 20 to 30 vpl
Number of Lanes: 3

T
Congestion Type: Mainline Signal Queue
Location: Old Alabama Rd
Frequency: Intermittent
Direction: Southbound
Queue Population: 20 to 30 vpl
Number of Lanes: 2
Note: During some observations, congestion was found in the left turn bay at the signal at Old Alabama Rd.

U
Congestion Type: Mainline Signal Queue
Location: Old Alabama Rd
Frequency: Intermittent
Direction: Northbound
Queue Population: 20 to 30 vpl
Number of Lanes: 2

V
Congestion Type: Mainline Signal Queue
Location: Terramont Dr/Martins Landing Dr
Frequency: Intermittent
Direction: Southbound
Queue Population: 20 to 25 vpl
Number of Lanes: 2

W
Congestion Type: Mainline Signal Queue
Location: Eves Rd
Frequency: Intermittent
Direction: Southbound
Queue Population: 20 to 30 vpl
Number of Lanes: 2

X
Congestion Type: Mainline Signal Queue
Location: Barnwell Rd/Ellard Dr
Frequency: Most Observations
Direction: Northbound
Number of Lanes: 2
Note: During the peak period, northbound congestion approaching Barnwell Rd typically extended back across the Chattahoochee River (a distance of approximately one mile).

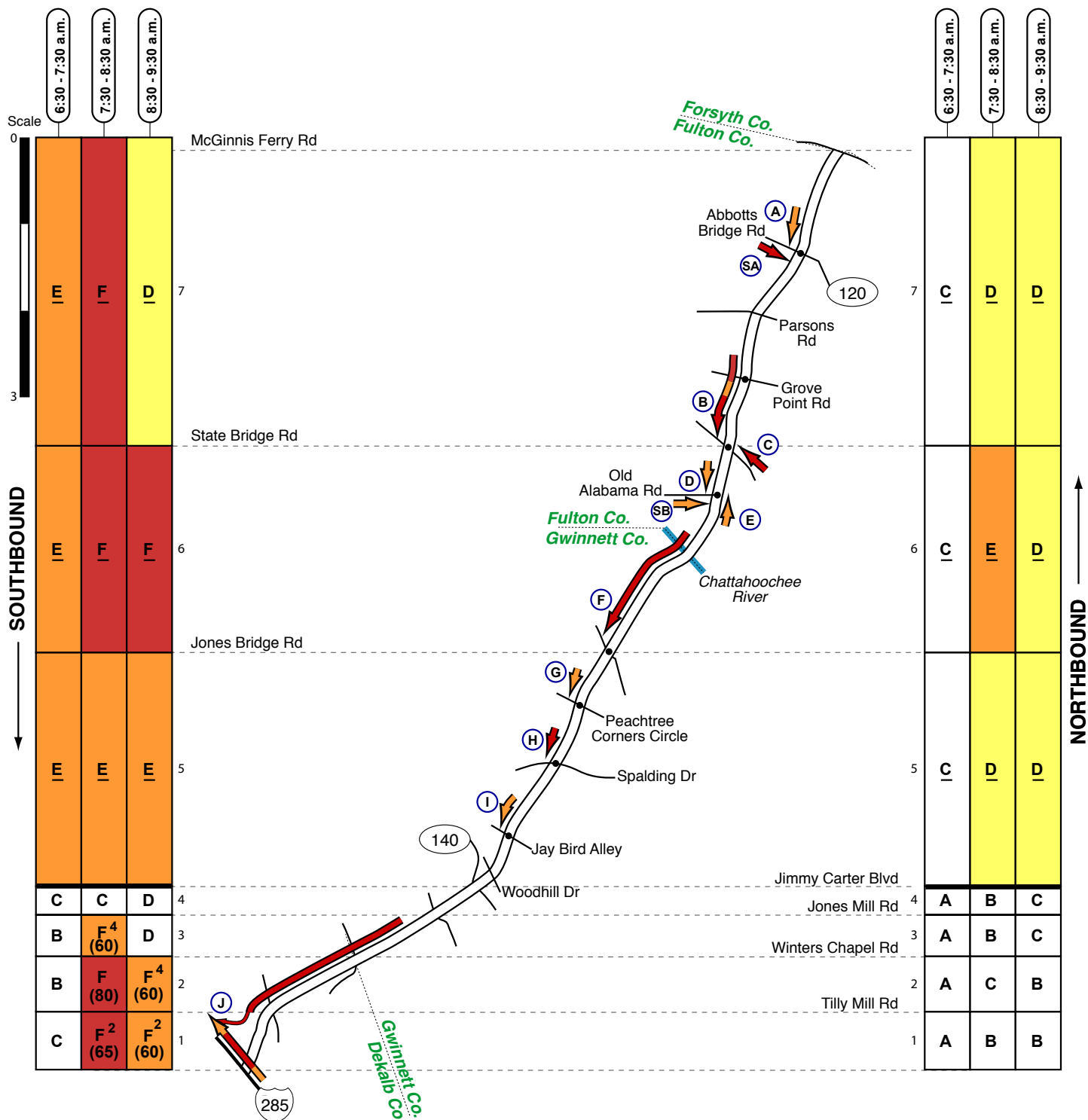
Y
Congestion Type: Mainline Signal Queue
Location: Spalding Dr
Frequency: Intermittent
Direction: Southbound
Queue Population: 20 to 30 vpl
Number of Lanes: 2
Note: Southbound congestion was found at Spalding Dr during one observation when downstream congestion appeared to back through the signal (the head of the queue downstream was found at Peachtree Corners Circle).

Z
Congestion Type: Mainline Signal Queue
Location: Spalding Dr
Frequency: Intermittent
Direction: Northbound
Queue Population: 20 to 25 vpl
Number of Lanes: 2

AA
Congestion Type: Mainline Signal Queue
Location: Peachtree Corners Circle
Frequency: Most Observations
Direction: Southbound
Queue Population: 20 to 60 vpl
Number of Lanes: 2
Note: During one observation, southbound congestion at Peachtree Corners Circle extended all the way back through the upstream signal at Spalding Dr (a distance of approximately one mile).

SA
Congestion Type: Surveyed Cross Road Signal Queue
Location: SR 120
Frequency: Intermittent
Direction: Southbound
Queue Population: 20 to 40 vpl
Number of Lanes: 2

SR 141 (Fulton/Gwinnett & Dekalb Counties) - Morning



SR 141 (Fulton/Gwinnett & Dekalb Counties) - Morning

A

Congestion Type: Mainline Signal Queue
 Location: SR 120
 Frequency: Intermittent
 Direction: Southbound
 Queue Population: 20 to 40 vpl
 Number of Lanes: 2
 Note: During some observations, southbound congestion approaching SR 120 was limited to the the left lane.

B

Congestion Type: Mainline Signal Queue
 Location: State Bridge Rd
 Frequency: Most Observations
 Direction: Southbound
 Queue Population: 20 to 120 vpl
 Number of Lanes: 2
 Note: During some observations, southbound congestion approaching the signal at State Bridge Rd extended back through the upstream signal at Grove Point Rd.

C

Congestion Type: Cross Road Signal Queue
 Location: State Bridge Rd
 Frequency: Peak Hour
 Direction: Northbound
 Queue Population: 20 to 40 vpl
 Number of Lanes: 2

D

Congestion Type: Mainline Signal Queue
 Location: Old Alabama Rd
 Frequency: Intermittent
 Direction: Southbound
 Queue Population: 20 to 25 vpl
 Number of Lanes: 2

E

Congestion Type: Mainline Signal Queue
 Location: Old Alabama Rd
 Frequency: Intermittent
 Direction: Northbound
 Queue Population: 20 to 35 vpl
 Number of Lanes: 2

F

Congestion Type: Mainline Signal Queue
 Location: Jones Bridge Rd
 Frequency: Most Observations
 Direction: Southbound
 Number of Lanes: 2
 Note: During the peak period, southbound congestion approaching the signal at Jones Bridge Rd typically extended back across the Chattahoochee River to the vicinity of the Atlanta Athletic Club (a distance of approximately two miles).

G

Congestion Type: Mainline Signal Queue
 Location: Peachtree Corners Circle
 Frequency: Intermittent
 Direction: Southbound
 Queue Population: 20 to 30 vpl
 Number of Lanes: 2

H

Congestion Type: Mainline Signal Queue
 Location: Spalding Dr
 Frequency: Peak Hour
 Direction: Southbound
 Queue Population: 20 to 30 vpl
 Number of Lanes: 2

I

Congestion Type: Mainline Signal Queue
 Location: Jay Bird Alley
 Frequency: Intermittent
 Direction: Southbound
 Queue Population: 20 to 25 vpl
 Number of Lanes: 2

J

Congestion Type: Mainline Congestion
 Frequency: Most observations after 7:30 a.m.
 Direction: Southbound
 Location: Between Jimmy Carter Blvd and I-285
 Queue Length: 2 to 3 miles
 Estimated Speed: 20 to 40 mph
 Potential Cause(s): The head of the queue was found on the ramp to I-285; congestion typically extended back into the right lane (and eventually across all lanes) of SR 141.

SA

Congestion Type: Surveyed Cross Road Signal Queue
 Location: SR 141
 Frequency: Peak Hour
 Direction: Eastbound
 Queue Population: 20 to 40 vpl
 Number of Lanes: 1

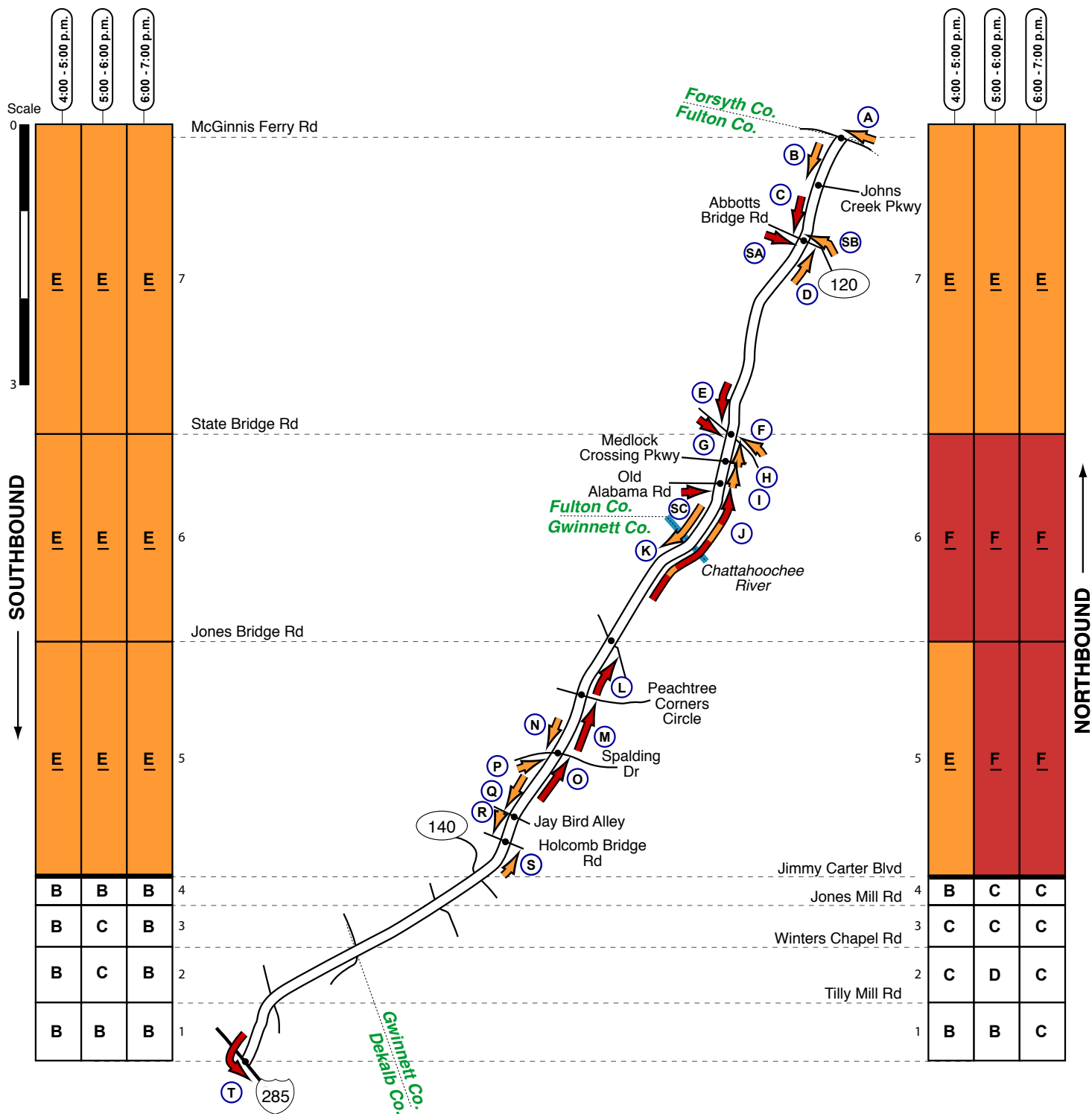
SB

Congestion Type: Left-Turn Queue
 Location: SR 141
 Frequency: Intermittent
 Direction: Eastbound
 Queue Population: 20 to 25 vpl
 Number of Lanes: 2
 Note: When congested, vehicles were queued in the two left-turn lanes at SR 141 (terminus of Old Alabama Rd).

Arterial LOS Legend

| A | B | C | D | E | F |
|------------|----------|----------|----------|-----------|----------|
| Very Light | Light | Moderate | Heavy | Congested | Severe |

SR 141 (Fulton/Gwinnett & Dekalb Counties) - Evening



SR 141 (Fulton/Gwinnett & Dekalb Counties) - Evening

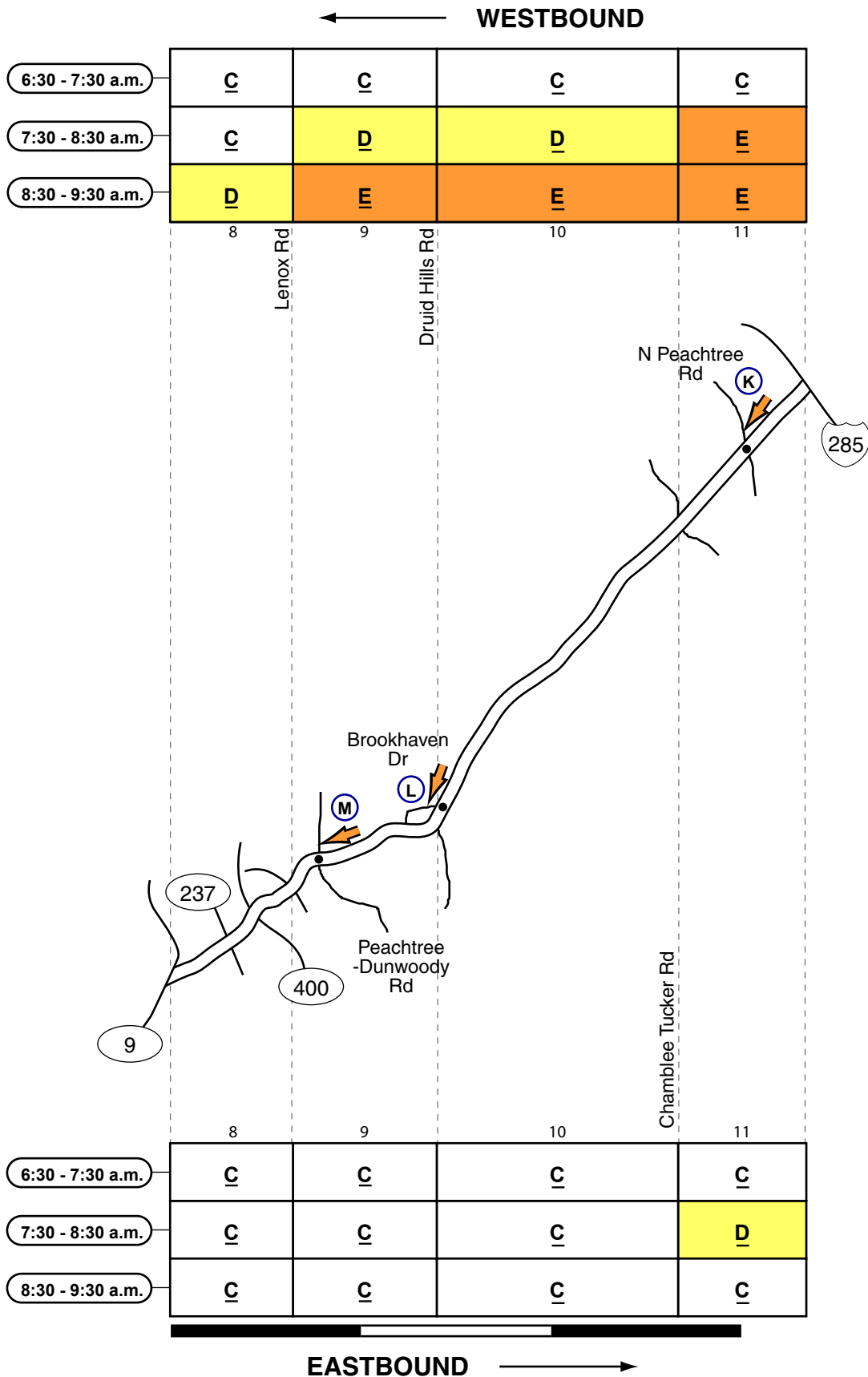
| | | | |
|---|---|---|---|
| A Congestion Type: Cross Road Signal Queue Location: McGinnis Ferry Rd Frequency: Intermittent Direction: Westbound Queue Population: 20 to 40 vpl Number of Lanes: 1 | G Congestion Type: Cross Road Signal Queue Location: State Bridge Rd Frequency: Most Observations Direction: Southbound Queue Population: 20 to 50 vpl Number of Lanes: 2 | L Congestion Type: Mainline Signal Queue Location: Jones Bridge Rd Frequency: Most Observations Direction: Northbound Queue Population: 20 to 40 vpl Number of Lanes: 2 | S Congestion Type: Mainline Signal Queue Location: Holcomb Bridge Rd Frequency: Intermittent Direction: Northbound Queue Population: 20 to 25 vpl Number of Lanes: 2 |
| B Congestion Type: Mainline Signal Queue Location: Johns Creek Pkwy Frequency: Intermittent Direction: Southbound Queue Population: 20 to 30 vpl Number of Lanes: 2 | H Congestion Type: Mainline Signal Queue Location: State Bridge Rd Frequency: Intermittent Direction: Northbound Queue Population: 20 to 40 vpl Number of Lanes: 2 Note: During some observations, northbound congestion approaching State Bridge Rd extended back through the upstream signal at Medlock Crossing Pkwy. | M Congestion Type: Mainline Signal Queue Location: Peachtree Corners Circle Frequency: Peak Hour Direction: Northbound Queue Population: 20 to 60 vpl Number of Lanes: 2 | T Congestion Type: Left-Turn Queue Location: I-285 Frequency: Peak Hour Direction: Southbound Queue Population: 30 to 50 vpl Number of Lanes: 2 |
| C Congestion Type: Mainline Signal Queue Location: SR 120 Frequency: Most Observations Direction: Southbound Queue Population: 20 to 40 vpl Number of Lanes: 2 Note: During some observations, southbound congestion at SR 120 was limited to the left turn bay at the signal. | I Congestion Type: Mainline Signal Queue Location: Medlock Crossing Pkwy Frequency: Intermittent Direction: Northbound Queue Population: 20 to 40 vpl Number of Lanes: 2 Note: During some observations, northbound congestion approaching Medlock Crossing Pkwy extended back through the upstream signal at Old Alabama Rd. | N Congestion Type: Mainline Signal Queue Location: Spalding Dr Frequency: Intermittent Direction: Southbound Queue Population: 20 to 30 vpl Number of Lanes: 2 | SA Congestion Type: Surveyed Cross Road Signal Queue Location: SR 141 Frequency: Most Observations Direction: Eastbound Queue Population: 20 to 60 vpl Number of Lanes: 1 |
| D Congestion Type: Mainline Signal Queue Location: SR 120 (Abbotts Bridge Rd) Frequency: Intermittent Direction: Northbound Queue Population: 20 to 30 vpl Number of Lanes: 2 | J Congestion Type: Mainline Signal Queue Location: Old Alabama Rd Frequency: Most Observations Direction: Northbound Number of Lanes: 2 Note: During the peak period, congestion typically extended back across the Chattahoochee River; on two of the mornings surveyed, congestion extended all the way back to Jones Bridge Rd (a distance of approximately 2 miles). | O Congestion Type: Mainline Signal Queue Location: Spalding Dr Frequency: Most Observations Direction: Northbound Queue Population: 20 to 60 vpl Number of Lanes: 2 | SB Congestion Type: Surveyed Cross Road Signal Queue Location: SR 141 Frequency: Intermittent Direction: Westbound Queue Population: 20 to 25 vpl Number of Lanes: 1 |
| E Congestion Type: Mainline Signal Queue Location: State Bridge Rd Frequency: Most Observations Direction: Southbound Queue Population: 20 to 40 vpl Number of Lanes: 2 Note: During some observations, southbound congestion approaching State Bridge Rd was limited to the left turn bay (and the left lane on SR 141). | K Congestion Type: Platoons Location: Between State Bridge Rd & Jones Bridge Rd Frequency: Intermittent Direction: Southbound Queue Population: 25 to 35 vpl Number of Lanes: 2 | P Congestion Type: Cross Road Signal Queue Location: Spalding Dr Frequency: Intermittent Direction: Eastbound Queue Population: 20 to 40 vpl Number of Lanes: 1 | SA Congestion Type: Left-Turn Queue Location: SR 141 Frequency: Most Observations Direction: Eastbound Queue Population: 20 to 55 vpl Number of Lanes: 2 Note: When congested, vehicles were queued in the two dedicated left-turn lanes at SR 141; vehicles turning right (southbound) on SR 141 appeared to bypass the queue without delay. |
| F Congestion Type: Cross Road Signal Queue Location: State Bridge Rd Frequency: Intermittent Direction: Northbound Queue Population: 20 to 30 vpl Number of Lanes: 2 | | Q Congestion Type: Mainline Signal Queue Location: Jay Bird Alley Frequency: Intermittent Direction: Southbound Queue Population: 20 to 25 vpl Number of Lanes: 2 | |
| | | R Congestion Type: Mainline Signal Queue Location: Holcomb Bridge Rd Frequency: Intermittent Direction: Southbound Queue Population: 20 to 30 vpl Number of Lanes: 2 | |

Arterial LOS Legend

| A | B | C | D | E | F |
|------------|-------|----------|-------|-----------|--------|
| Very Light | Light | Moderate | Heavy | Congested | Severe |

Spring 2010

SR 141 (DeKalb County) - Morning



Arterial LOS Legend

| A | B | C | D | E | F |
|------------|-------|----------|-------|-----------|--------|
| Very Light | Light | Moderate | Heavy | Congested | Severe |

SR 141 (DeKalb County) - Morning

K

Congestion Type: Mainline Signal Queue/Platoons

Location: Peachtree Rd

Frequency: Intermittent

Direction: Southbound

Queue Population: 20 to 30 vpl

Number of Lanes: 2

L

Congestion Type: Mainline Signal Queue

Location: Brookhaven Dr

Frequency: Intermittent

Direction: Southbound

Queue Population: 20 to 40 vpl

Number of Lanes: 2

M

Congestion Type: Mainline Signal Queue

Location: Peachtree-Dunwoody Rd

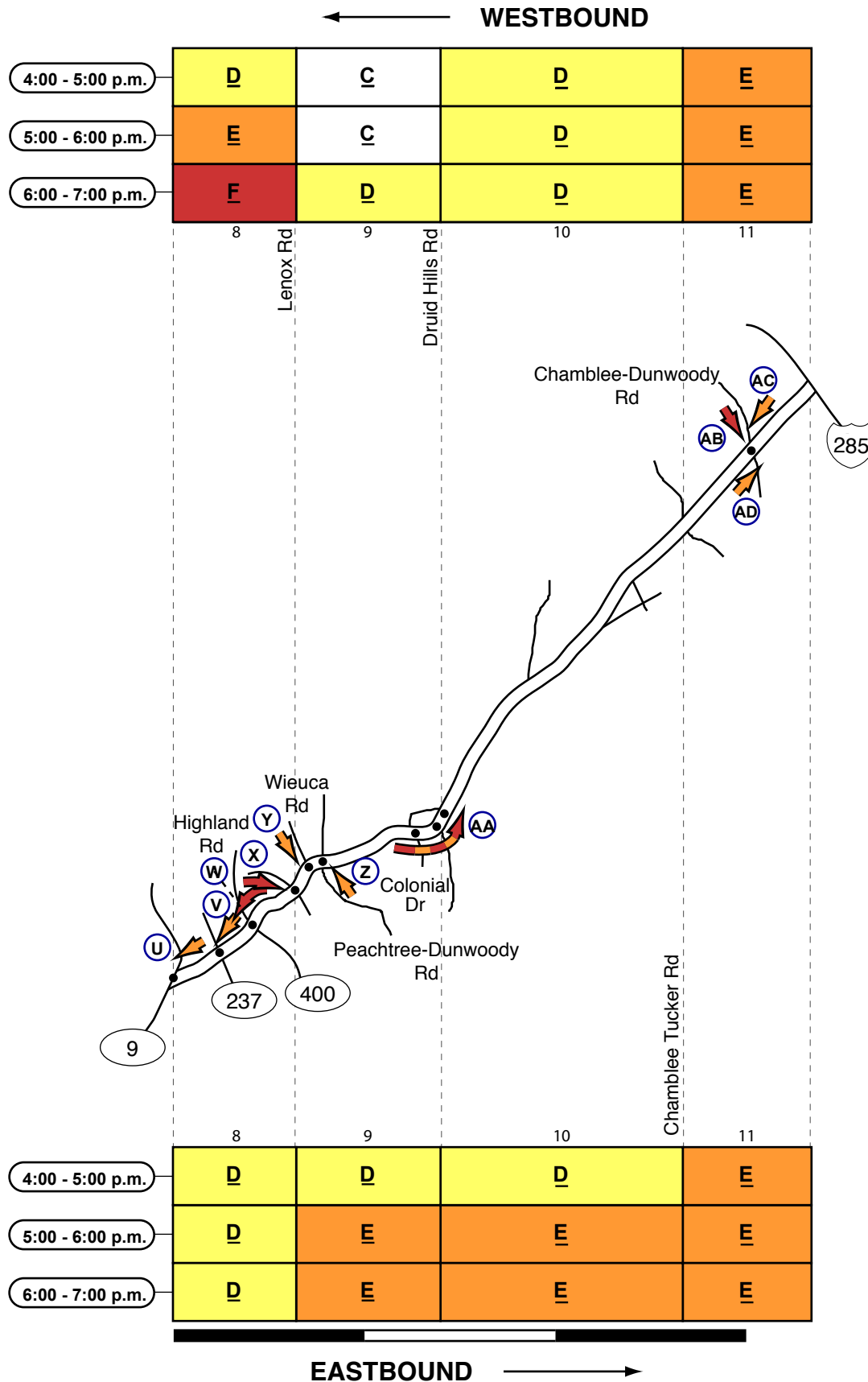
Frequency: Intermittent

Direction: Southbound

Queue Population: 20 to 25 vpl

Number of Lanes: 3

SR 141 (DeKalb County) - Evening



Arterial LOS Legend

| A | B | C | D | E | F |
|------------|-------|----------|-------|-----------|--------|
| Very Light | Light | Moderate | Heavy | Congested | Severe |

Spring 2010

SR 141 (DeKalb County) - Evening

PERFORMANCE RATINGS

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U

Congestion Type: Mainline Signal Queue
Location: SR 9
Frequency: Intermittent
Direction: Southbound
Queue Population: 20 to 30 vpl
Number of Lanes: 3

V

Congestion Type: Mainline Signal Queue
Location: SR 237
Frequency: Intermittent
Direction: Southbound
Queue Population: 20 to 30 vpl
Number of Lanes: 3

W

Congestion Type: Mainline Signal Queue
Location: Highland Rd
Frequency: Peak Hour
Direction: Southbound
Queue Population: 20 to 70 vpl
Number of Lanes: 3
Note: When congested, the queue at Highland Dr typically extended back through several upstream signals.

X

Congestion Type: Cross Road Signal Queue
Location: Lennox Rd
Frequency: Peak Hour
Direction: Southbound
Queue Population: 20 to 60 vpl
Number of Lanes: 5

Y

Congestion Type: Cross Road Signal Queue
Location: Wieuca Dr
Frequency: Intermittent
Direction: Southbound
Queue Population: 20 to 35 vpl
Number of Lanes: 2

Z

Congestion Type: Cross Road Signal Queue
Location: Peachtree-Dunwoody Rd
Frequency: Intermittent
Direction: Northbound
Queue Population: 20 to 30 vpl
Number of Lanes: 1

AA

Congestion Type: Mainline Signal Queues
Location: Dresden Rd / Druid Hills Rd / Colonial Dr
Frequency: Most Observations
Direction: Northbound
Queue Population: 20 to 50 vpl
Number of Lanes: 2
Note: During some observations, northbound congestion approaching Dresden Rd and N. Druid Hills Rd extended back through one or two upstream signals.

AB

Congestion Type: Cross Road Signal Queue
Location: Chamblee Dunwoody Rd
Frequency: Most Observations
Direction: Southbound
Queue Population: 20 to 40 vpl
Number of Lanes: 1

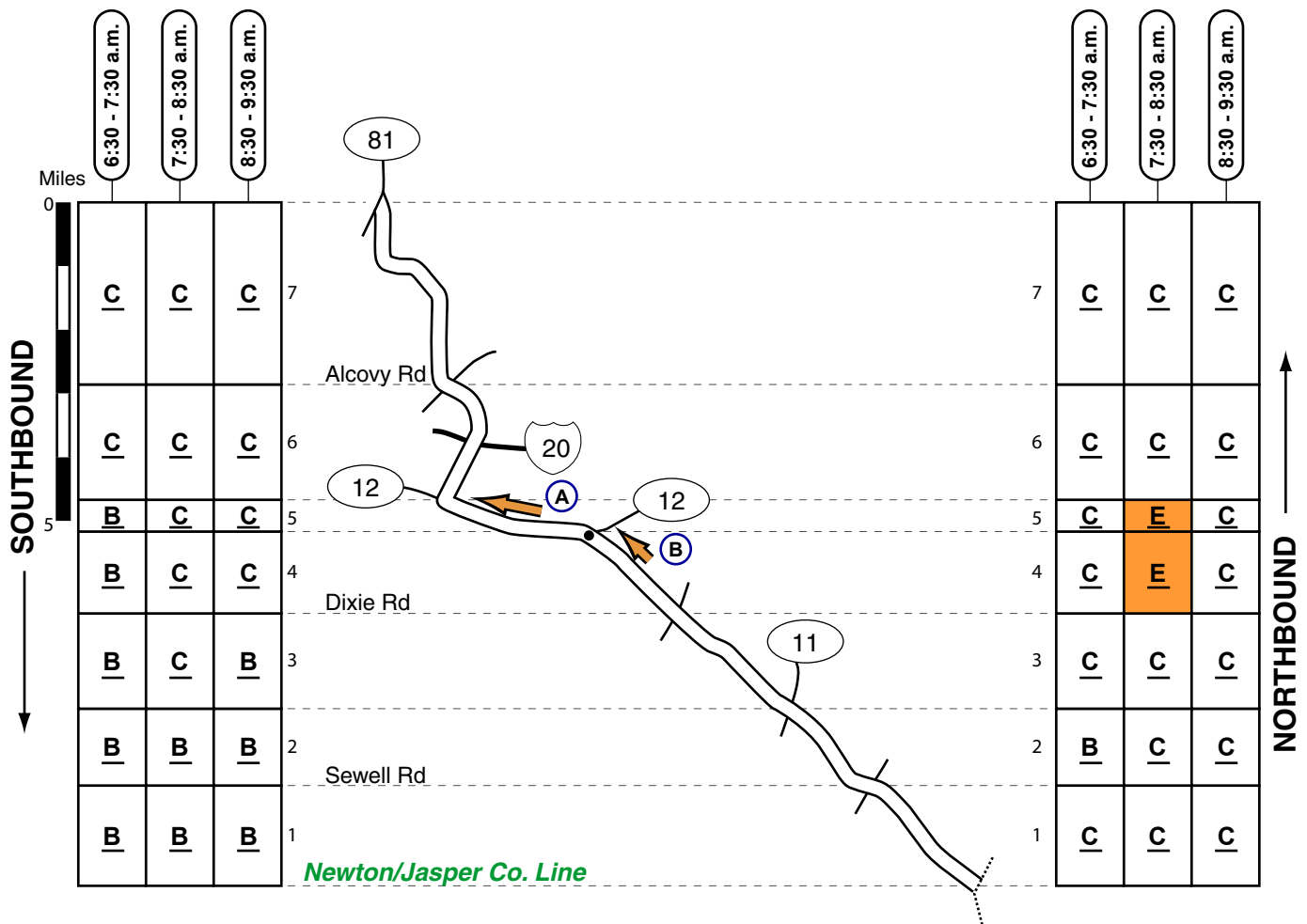
AC

Congestion Type: Mainline Signal Queue
Location: Chamblee Dunwoody Rd
Frequency: Intermittent
Direction: Southbound
Queue Population: 20 to 30 vpl
Number of Lanes: 2

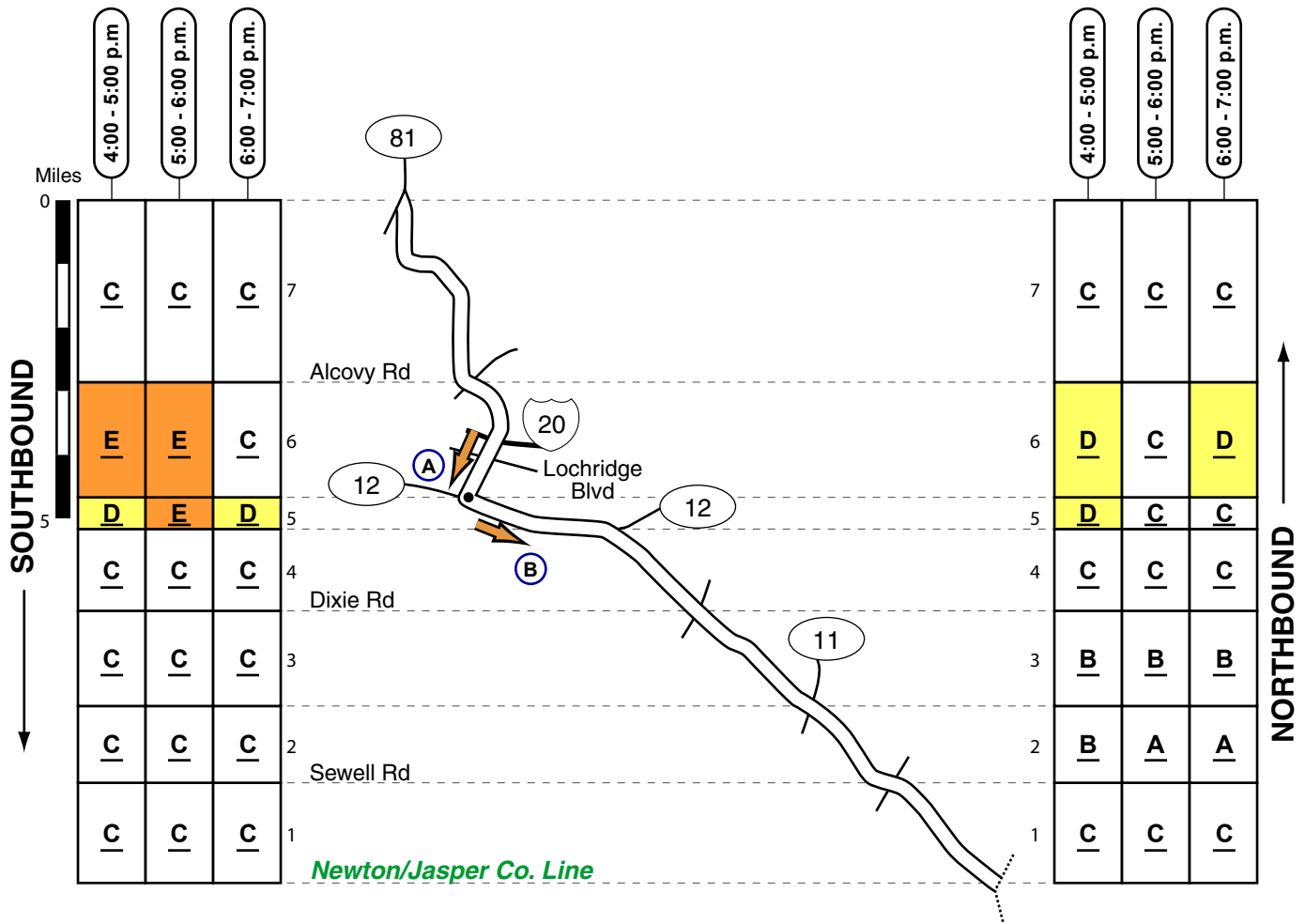
AD

Congestion Type: Mainline Signal Queue
Location: Chamblee Dunwoody Rd
Frequency: Intermittent
Direction: Northbound
Queue Population: 20 to 25 vpl
Number of Lanes: 25

SR 142 (Newton County) - Morning



SR 142 (Newton County) - Evening



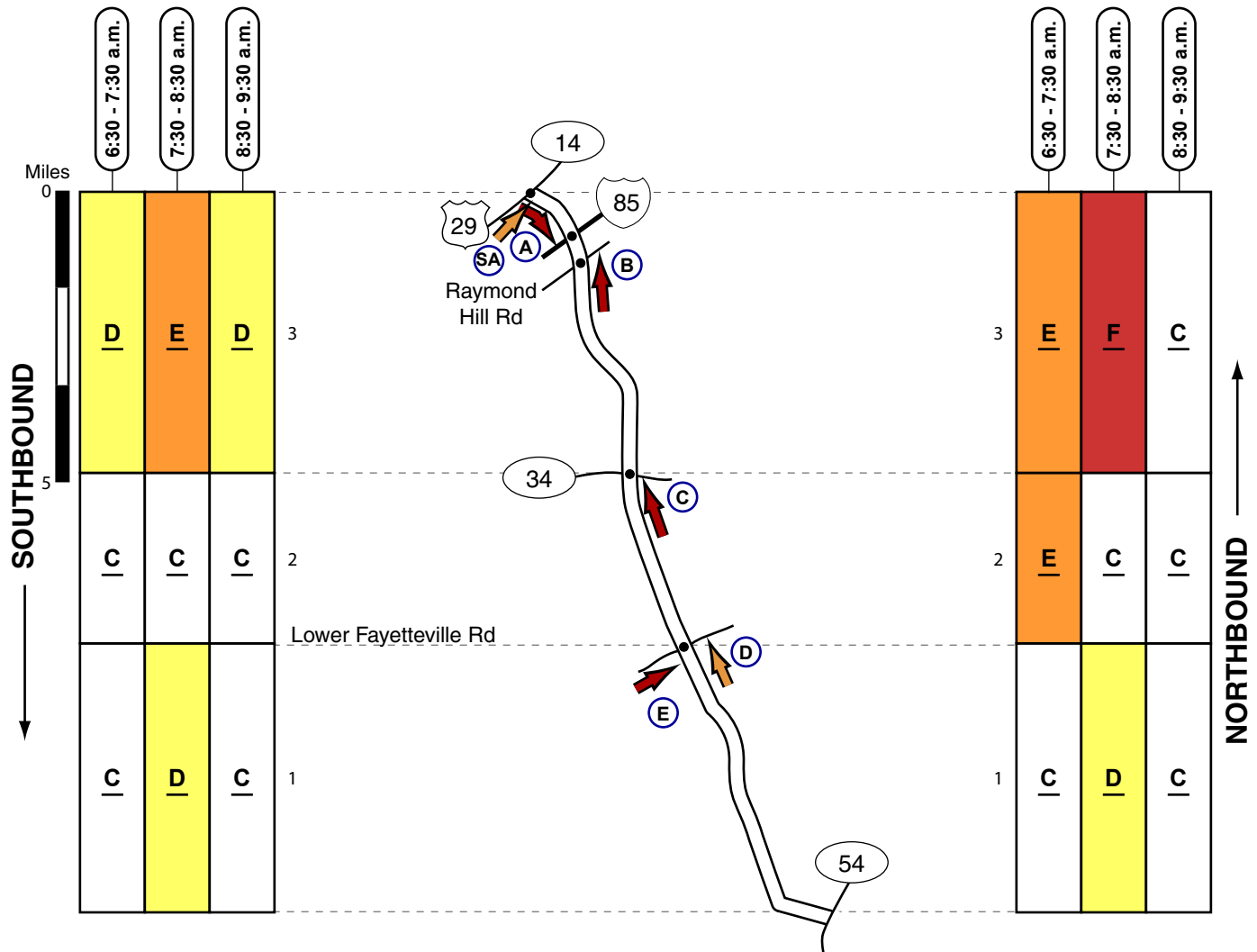
A
 Congestion Type: Mainline Signal Queue
 Location: SR 12
 Frequency: Intermittent
 Direction: Southbound
 Queue Population: 20 to 40 vpl
 Number of Lanes: 1

B
 Congestion Type: Platoons
 Location: Between SR 12 intersections
 Frequency: Intermittent
 Direction: Eastbound
 Platoon Population: 25 to 30 vpl
 Number of Lanes: 1

Arterial LOS Legend

| | | | | | |
|------------|----------|----------|----------|-----------|----------|
| A | B | C | D | E | F |
| Very Light | Light | Moderate | Heavy | Congested | Severe |

SR 154 (Coweta County) - Morning



A
Congestion Type: Mainline Signal Queue
Location: I-85
Frequency: Peak Hour
Direction: Southbound
Queue Population: 20 to 40 vpl
Number of Lanes: 2

B
Congestion Type: Mainline Signal Queue
Location: Raymond Hill Rd
Frequency: Peak Hour
Direction: Northbound
Queue Population: 25 to 50 vpl
Number of Lanes: 1

C
Congestion Type: Mainline Signal Queue
Location: SR 34
Frequency: Peak hour
Direction: Northbound
Queue Population: 20 to 30 vpl
Number of Lanes: 1

D
Congestion Type: Mainline Signal Queue
Location: Lower Fayetteville Rd
Frequency: One time only
Direction: Northbound
Queue Population: 20 to 25 vpl
Number of Lanes: 1

E
Congestion Type: Cross Road Signal Queue
Location: Lower Fayetteville Rd
Frequency: Peak Hour
Direction: Eastbound
Queue Population: 20 to 50 vpl
Number of Lanes: 1

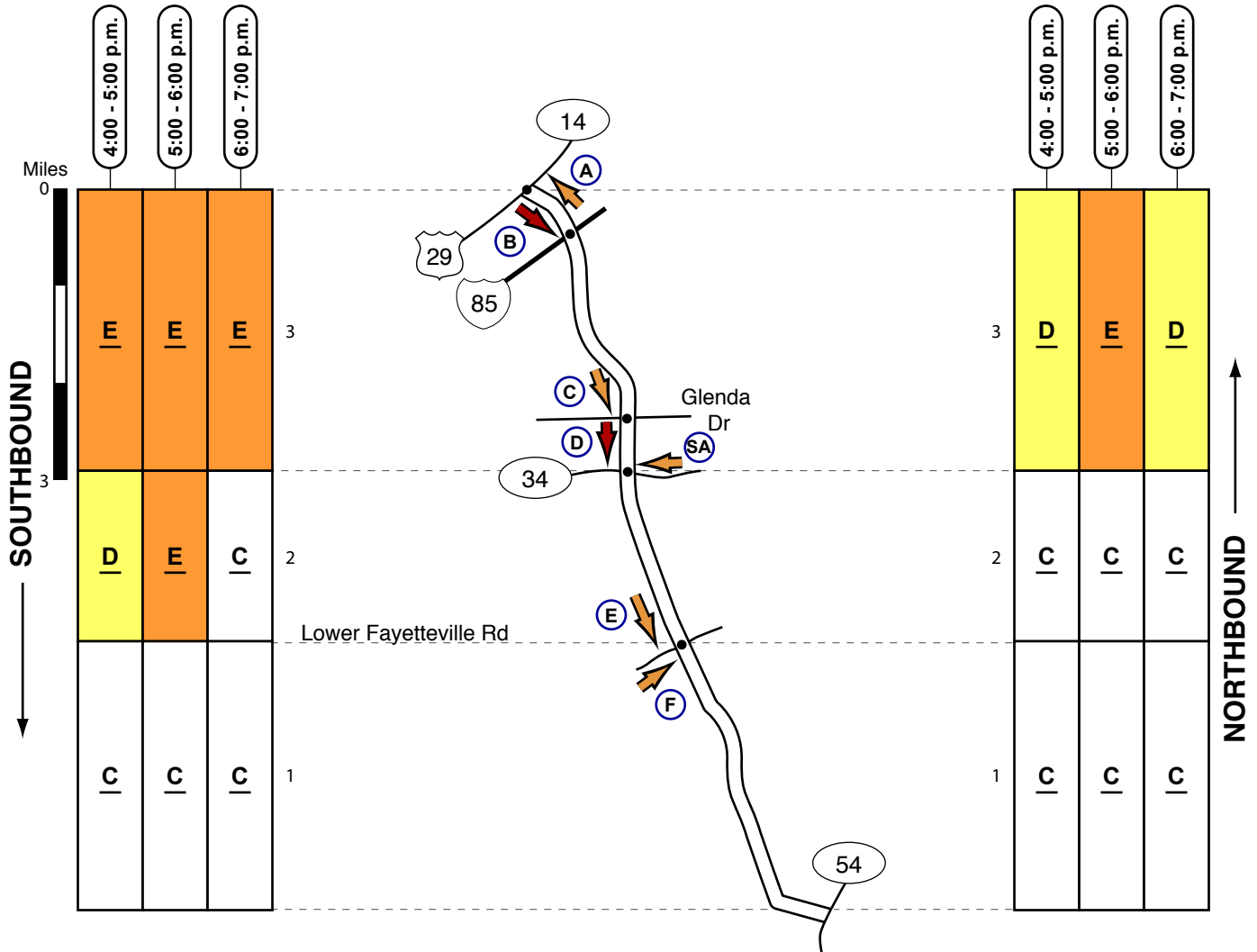
SA
Congestion Type: Surveyed Cross Road Signal Queue
Location: SR 14
Frequency: Intermittent
Direction: Northbound
Queue Population: 20 to 40 vpl
Number of Lanes: 1

Spring 2010

SR 154 (Coweta County) - Evening

PERFORMANCE RATINGS

299



A
 Congestion Type: Mainline Signal Queue
 Location: SR 14/US 29
 Frequency: Intermittent
 Direction: Northbound
 Queue Population: 20 to 50 vpl
 Number of Lanes: 1

B
 Congestion Type: Mainline Signal Queue
 Location: I-85
 Frequency: Most observations
 Direction: Southbound
 Queue Population: 20 to 35 vpl
 Number of Lanes: 1

C
 Congestion Type: Mainline Signal Queue
 Location: Glenda Dr
 Frequency: Intermittent
 Direction: Southbound
 Queue Population: 20 to 35 vpl
 Number of Lanes: 1

D
 Congestion Type: Mainline Signal Queue
 Location: SR 34
 Frequency: Peak hour
 Direction: Southbound
 Queue Population: 20 to 50 vpl
 Number of Lanes: 1

E
 Congestion Type: Mainline Signal Queue
 Location: Lower Fayetteville Rd
 Frequency: Intermittent
 Direction: Southbound
 Queue Population: 20 to 30 vpl
 Number of Lanes: 1

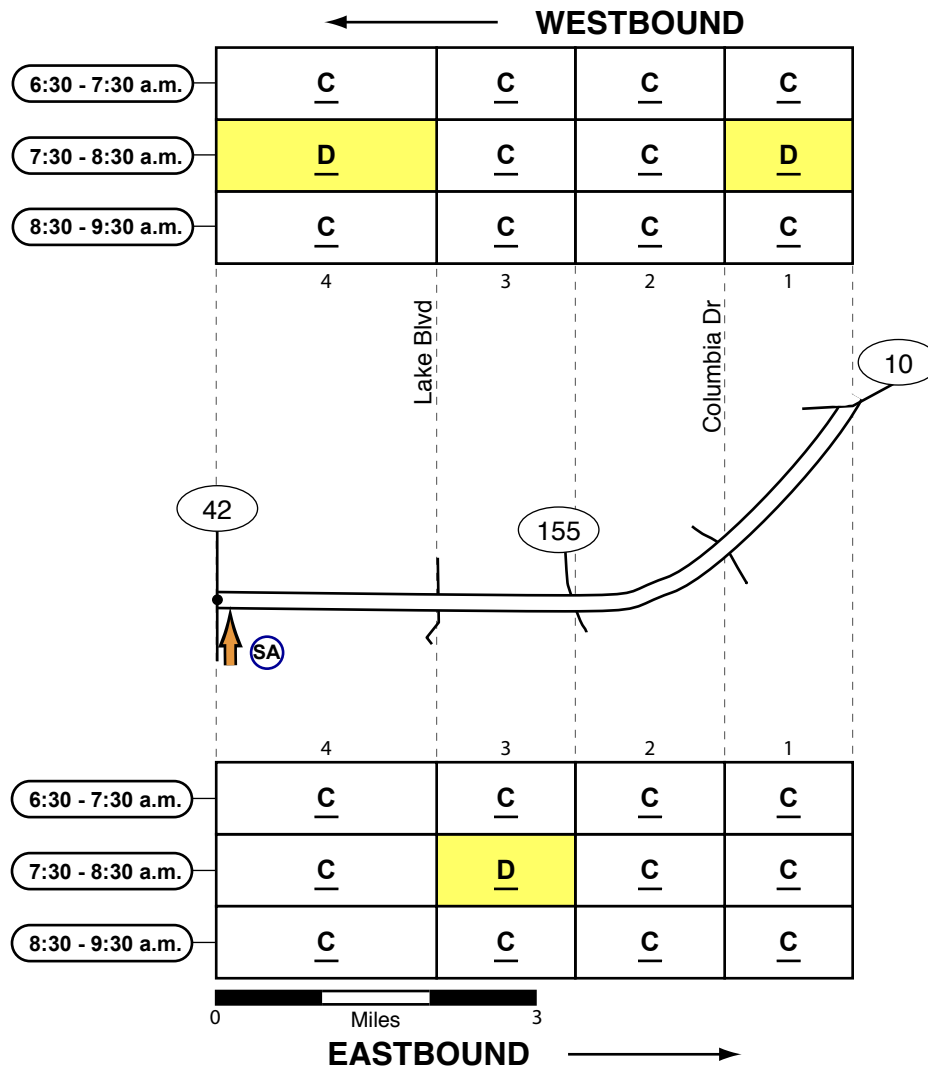
F
 Congestion Type: Cross Road Signal Queue
 Location: Lower Fayetteville Rd
 Frequency: Peak Hour
 Direction: Eastbound
 Queue Population: 20 to 50 vpl
 Number of Lanes: 1

SA
 Congestion Type: Surveyed Cross Road Signal Queue
 Location: SR 34
 Frequency: Intermittent
 Direction: Westbound
 Queue Population: 20 to 30 vpl
 Number of Lanes: 2

Arterial LOS Legend

| A | B | C | D | E | F |
|------------|-------|----------|-------|-----------|--------|
| Very Light | Light | Moderate | Heavy | Congested | Severe |

SR 154 (DeKalb County) - Morning



SA

Congestion Type: Surveyed Cross Road Signal Queue

Location: SR 42

Frequency: Intermittent

Direction: Northbound

Queue Population: 20 to 30 vpl

Number of Lanes: 2

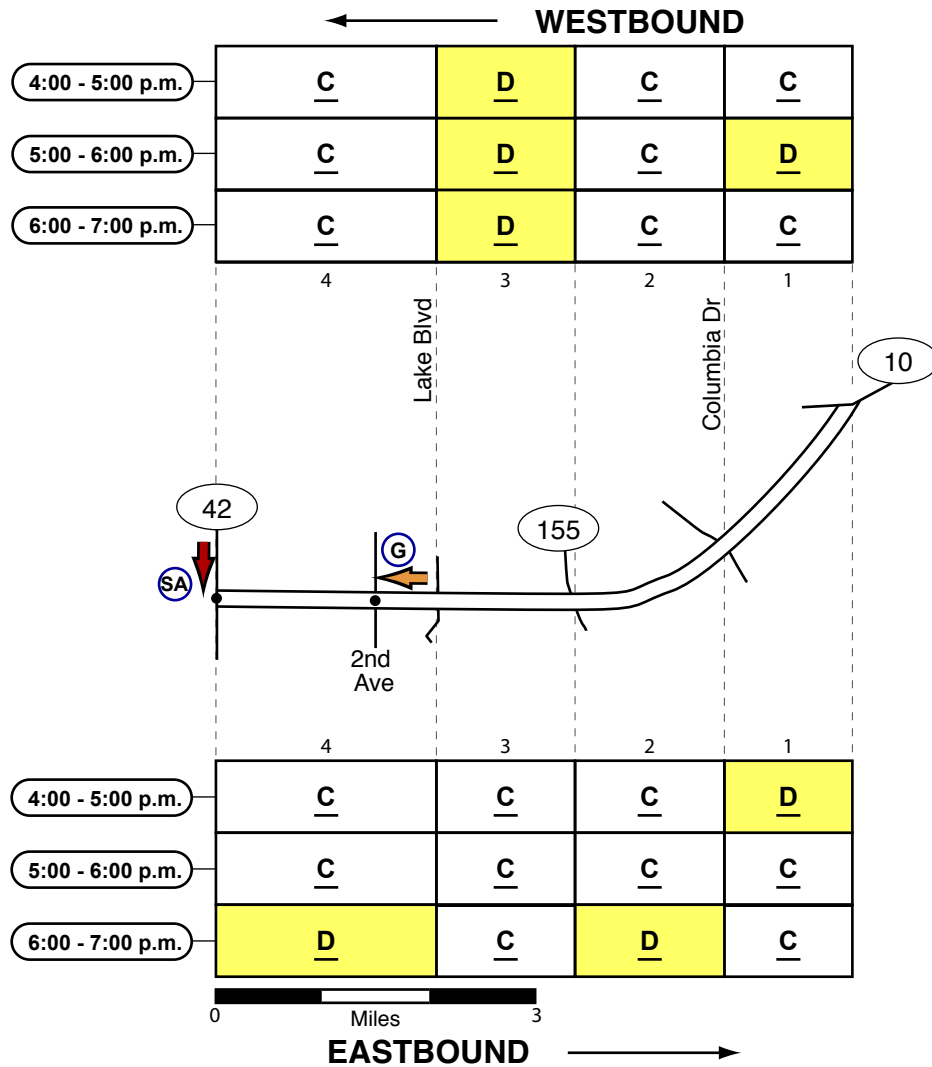
Arterial LOS Legend

| A | B | C | D | E | F |
|------------|-------|----------|-------|-----------|--------|
| Very Light | Light | Moderate | Heavy | Congested | Severe |

Spring 2010

SR 154 (DeKalb County) - Evening

PERFORMANCE RATINGS | 301



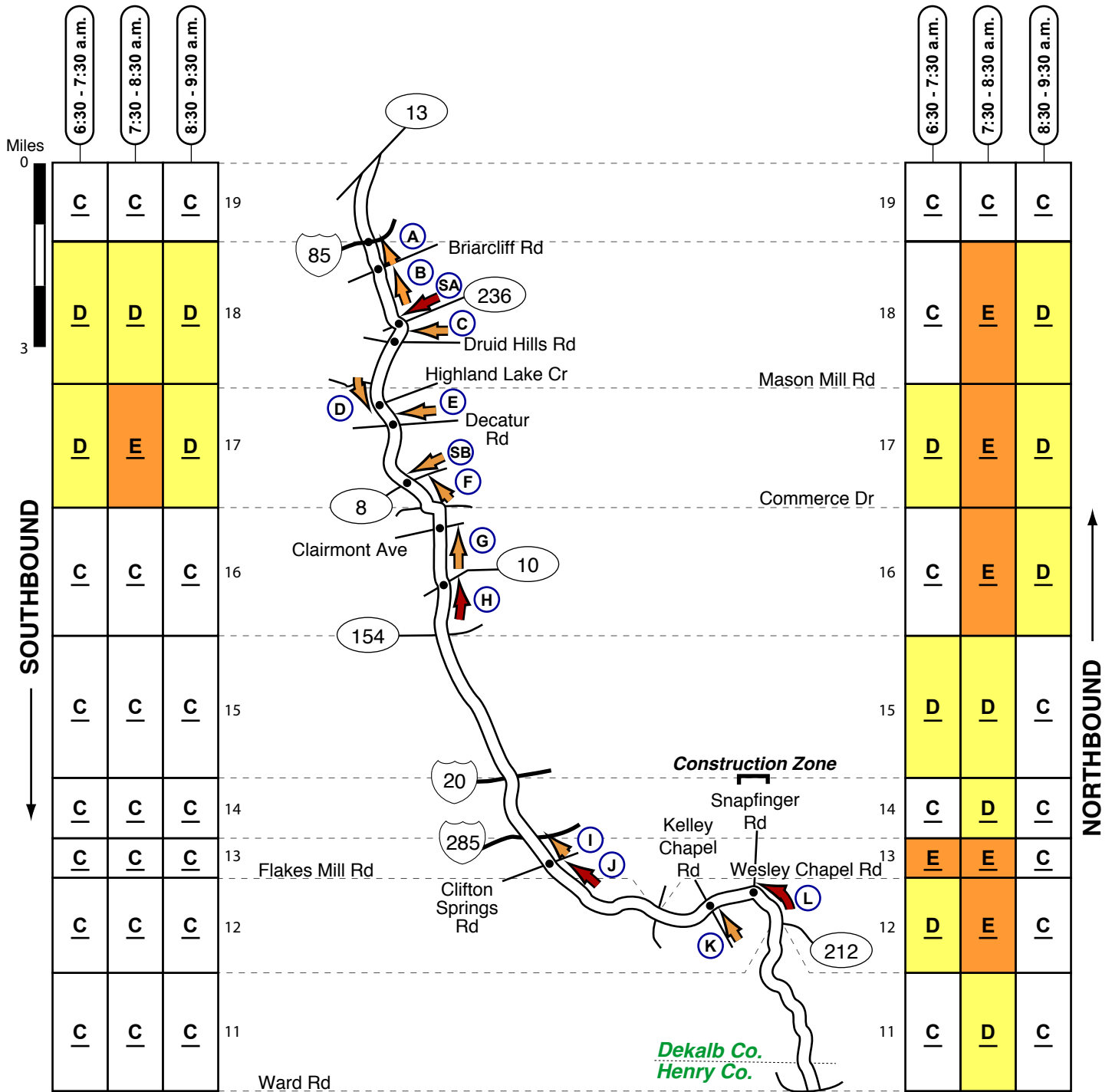
G
 Congestion Type: Mainline Signal Queue
 Location: 2nd Ave
 Frequency: Intermittent
 Direction: Westbound
 Queue Population: 20 to 30 vpl
 Number of Lanes: 1
 Note: During the evening commuter period, the center reversible lane was open to eastbound traffic.

SA
 Congestion Type: Surveyed Cross Road Signal Queue
 Location: SR 42
 Frequency: Peak Hour
 Direction: Southbound
 Queue Population: 20 to 40 vpl
 Number of Lanes: 2

Arterial LOS Legend

| A | B | C | D | E | F |
|------------|-------|----------|-------|-----------|--------|
| Very Light | Light | Moderate | Heavy | Congested | Severe |

SR 155 (DeKalb & Henry Counties) - Morning



Arterial LOS Legend

| A | B | C | D | E | F |
|------------|-------|----------|-------|-----------|--------|
| Very Light | Light | Moderate | Heavy | Congested | Severe |

SR 155 (DeKalb & Henry Counties) - Morning**A**

Congestion Type: Left-Turn Queue

Location: I-85

Frequency: Intermittent

Direction: Northbound

Queue Population: 20 to 25 vpl

Number of Lanes: 1

Note: When congested, vehicles were queued in the dedicated left turn lane at the signal at I-85 (left-turning vehicles access I-85 southbound).

B

Congestion Type: Mainline Signal Queue

Location: Briarcliff Rd

Frequency: Intermittent

Direction: Northbound

Queue Population: 20 to 25 vpl

Number of Lanes: 2

C

Congestion Type: Cross Road Signal Queue

Location: Druid Hills Rd

Frequency: Intermittent

Direction: Westbound

Queue Population: 20 to 30 vpl

Number of Lanes: 2

D

Congestion Type: Mainline Signal Queue

Location: Highland Lake Cr

Frequency: Intermittent

Direction: Southbound

Queue Population: 20 to 40 vpl

Number of Lanes: 2

E

Congestion Type: Cross Road Signal Queue

Location: Decatur Rd

Frequency: Intermittent

Direction: Westbound

Queue Population: 20 to 30 vpl

Number of Lanes: 1

F

Congestion Type: Mainline Signal Queue

Location: SR 8

Frequency: Intermittent

Direction: Northbound

Queue Population: 20 to 30 vpl

Number of Lanes: 2

G

Congestion Type: Mainline Signal Queue

Location: Clairmont Ave

Frequency: Intermittent

Direction: Northbound

Queue Population: 20 to 30 vpl

Number of Lanes: 2

Note: During some observations, congestion was limited to the right lane of two at the signal (through or right-turning vehicles).

H

Congestion Type: Mainline Signal Queue

Location: SR 10

Frequency: Peak Hour

Direction: Northbound

Queue Population: 20 to 30 vpl

Number of Lanes: 1

I

Congestion Type: Mainline Signal Queue

Location: I-285

Frequency: Intermittent

Direction: Northbound

Queue Population: 20 to 25 vpl

Number of Lanes: 2

J

Congestion Type: Mainline Signal Queue

Location: Clifton Springs Rd

Frequency: Peak Hour

Direction: Northbound

Queue Population: 20 to 40 vpl

Number of Lanes: 2

K

Congestion Type: Cross Road Signal Queue

Location: Kelley Chapel Rd

Frequency: Intermittent

Direction: Northbound

Queue Population: 20 to 30 vpl

Number of Lanes: 1

L

Congestion Type: Left-Turn Queue

Location: Snapfinger Rd

Frequency: Peak Hour

Direction: Northbound

Queue Population: 20 to 80 vpl

Number of Lanes: 1

SA

Congestion Type: Surveyed Cross Road Signal Queue

Location: SR 236

Frequency: Peak Hour

Direction: Westbound

Population: 45 to 55 vpl

Number of Lanes: 1

SB

Congestion Type: Surveyed Cross Road Signal Queue

Location: SR 8

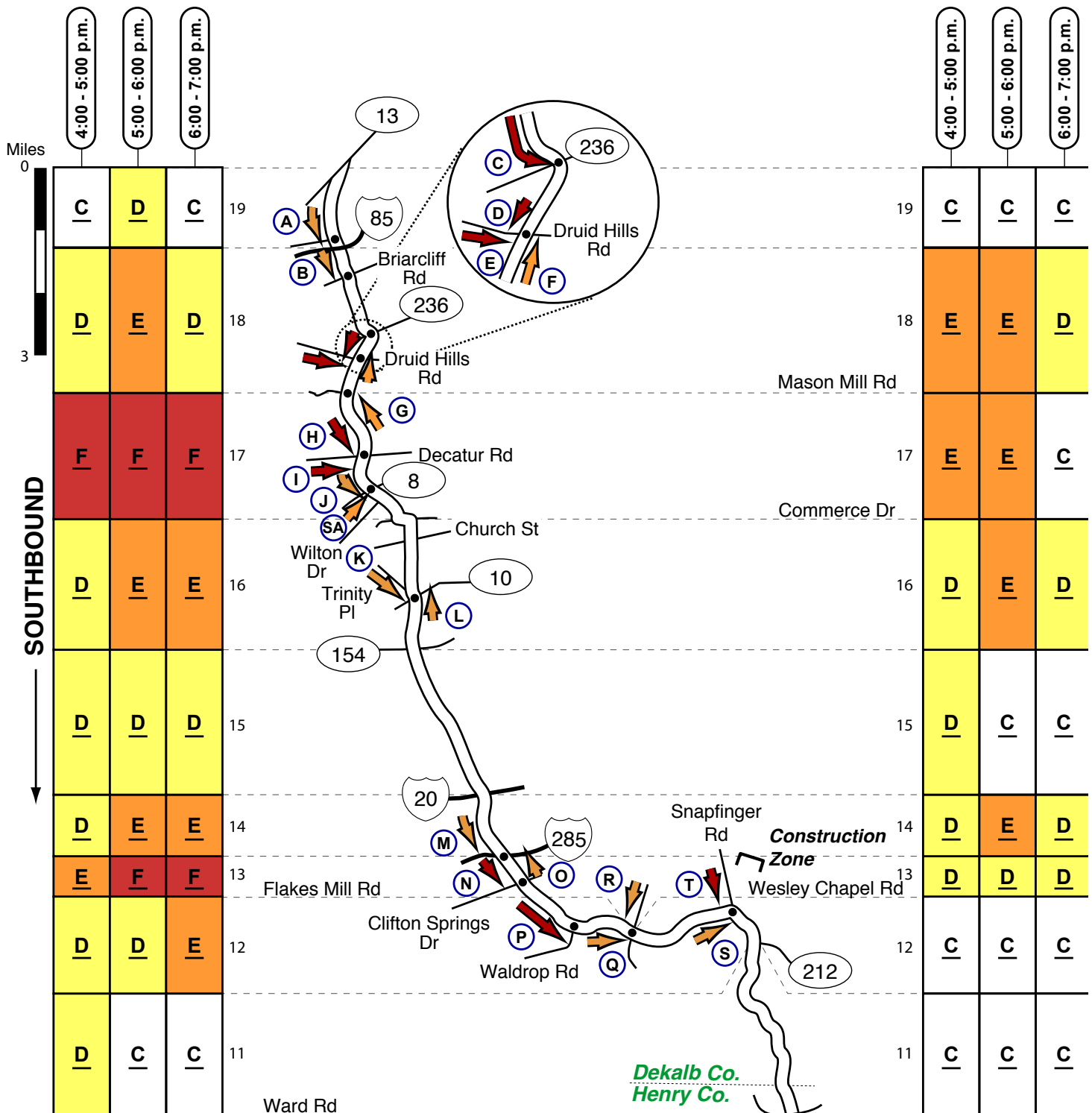
Frequency: One time only

Direction: Westbound

Queue Population: 20 to 25 vpl

Number of Lanes: 2

SR 155 (DeKalb & Henry Counties) - Evening



SR 155 (DeKalb & Henry Counties) - Evening

A
Congestion Type: Mainline Signal Queue
Location: I-85
Frequency: Intermittent
Direction: Southbound
Queue Population: 20 to 30 vpl
Number of Lanes: 2

B
Congestion Type: Mainline Signal Queue
Location: Briarcliff Rd
Frequency: Intermittent
Direction: Southbound
Queue Population: 20 to 30 vpl
Number of Lanes: 2

C
Congestion Type: Mainline Signal Queue
Location: SR 236
Frequency: Peak Hour
Direction: Southbound
Queue Population: 20 to 40 vpl
Number of Lanes: 2

D
Congestion Type: Left-Turn Queue
Location: Druid Hills Rd
Frequency: Most Observations
Direction: Southbound
Queue Population: 20 to 50 vpl
Number of Lanes: 2
Note: Congestion in the dedicated left-turn lane sometimes extended back into both lanes on SR 155 on the approach to the signal at Druid Hills Rd.

E
Congestion Type: Cross Road Signal Queue
Location: Druid Hills Rd
Frequency: Most Observations
Direction: Eastbound
Queue Population: 20 to 60 vpl
Number of Lanes: 2

F
Congestion Type: Mainline Signal Queue
Location: Druid Hills Rd
Frequency: Intermittent
Direction: Northbound
Queue Population: 20 to 40 vpl
Number of Lanes: 2

G
Congestion Type: Mainline Signal Queue
Location: Mason Mill Rd
Frequency: Intermittent
Direction: Northbound
Queue Population: 20 to 40 vpl
Number of Lanes: 2

H
Congestion Type: Mainline Signal Queue
Location: Decatur Rd
Frequency: Most Observations
Direction: Southbound
Queue Population: 20 to 50 vpl
Number of Lanes: 2
Note: Southbound congestion at Decatur Rd typically extended back through the upstream signal at Ladson Ct.

I
Congestion Type: Cross Road Signal Queue
Location: Decatur Rd
Frequency: Most Observations
Direction: Eastbound
Queue Population: 20 to 40 vpl
Number of Lanes: 2

J
Congestion Type: Mainline Signal Queue
Location: SR 8
Frequency: Intermittent
Direction: Southbound
Queue Population: 20 to 30 vpl
Number of Lanes: 2

K
Congestion Type: Cross Road Signal Queue
Location: Trinity Pl
Frequency: Intermittent
Direction: Eastbound
Queue Population: 20 to 30 vpl
Number of Lanes: 2

L
Congestion Type: Mainline Signal Queue
Location: SR 10
Frequency: Intermittent
Direction: Northbound
Queue Population: 20 to 25 vpl
Number of Lanes: 1

M
Congestion Type: Mainline Signal Queue/
Platoons
Location: Between I-20 & I-285
Frequency: Intermittent
Direction: Southbound
Platoon Population: 20 to 30 vpl
Number of Lanes: 2
Note: Signals contributing to the congestion included Rainbow Dr, Warren Rd and Fairlake Dr.

N
Congestion Type: Mainline Signal Queue
Location: Clifton Springs Rd
Frequency: Peak Hour
Direction: Southbound
Queue Population: 20 to 50 vpl
Number of Lanes: 2

O
Congestion Type: Mainline Signal Queue
Location: I-285
Frequency: Intermittent
Direction: Northbound
Queue Population: 20 to 25 vpl
Number of Lanes: 2

P
Congestion Type: Mainline Signal Queue
Location: Waldrop Rd
Frequency: Most Observations
Direction: Southbound
Queue Population: 20 to 120 vpl
Number of Lanes: 2
Note: During the peak period, congestion sometimes extended back through the upstream signal at Clifton Springs Rd (a distance of approximately one mile).

Q
Congestion Type: Mainline Signal Queue
Location: Wesley Chapel Rd
Frequency: Intermittent
Direction: Southbound
Queue Population: 20 to 30 vpl
Number of Lanes: 2

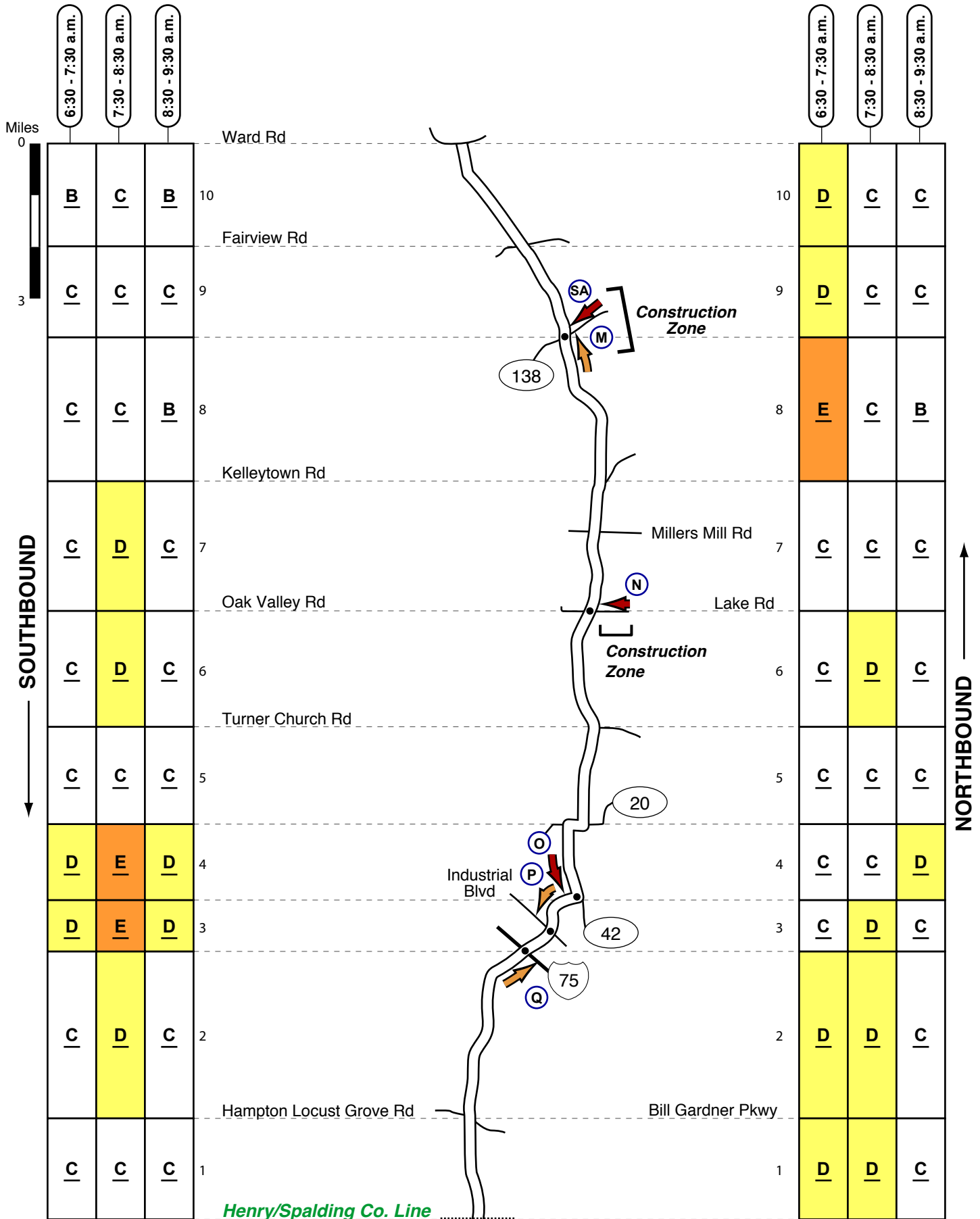
R
Congestion Type: Cross Road Signal Queue
Location: Wesley Chapel Rd
Frequency: Intermittent
Direction: Southbound
Queue Population: 20 to 50 vpl
Number of Lanes: 1

S
Congestion Type: Right-Turn Queue/
Platoons
Location: Snapfinger Rd
Frequency: Intermittent
Direction: Southbound
Queue Population: 20 to 30 vpl
Number of Lanes: 1

T
Congestion Type: Cross Road Signal Queue
Location: Snapfinger Rd
Frequency: Most Observations
Direction: Southbound
Queue Population: 20 to 40 vpl
Number of Lanes: 1

SA
Congestion Type: Surveyed Cross Road
Signal Queue
Location: SR 8
Frequency: Intermittent
Direction: Eastbound
Queue Population: 20 to 25 vpl
Number of Lanes: 2

SR 155 (DeKalb & Henry Counties) - Morning



Arterial LOS Legend

| A | B | C | D | E | F |
|------------|-------|----------|-------|-----------|--------|
| Very Light | Light | Moderate | Heavy | Congested | Severe |

SR 155 (DeKalb & Henry Counties) - Morning

M

Congestion Type: Mainline Signal Queue

Location: SR 138

Frequency: Intermittent

Direction: Northbound

Queue Population: 20 to 30 vpl

Number of Lanes: 1

Note: Congestion may have been exacerbated by ongoing construction at the intersection.

N

Congestion Type: Cross Road Signal Queue

Location: Lake Rd

Frequency: Peak Hour

Direction: Westbound

Queue Population: 20 to 30 vpl

Number of Lanes: 1

Note: The head of the queue was typically found in the left-turn lane at the signal; congestion extended back into the mainline of Lake Rd. Ongoing construction on Lake Rd may have exacerbated the congestion.

O

Congestion Type: Mainline Signal Queue

Location: SR 42

Frequency: Peak Hour

Direction: Southbound

Queue Population: 20 to 45 vpl

Number of Lanes: 1

P

Congestion Type: Mainline Signal Queue

Location: Industrial Blvd

Frequency: Intermittent

Direction: Southbound

Queue Population: 20 to 25 vpl

Number of Lanes: 1

Q

Congestion Type: Mainline Signal Queue

Location: I-75

Frequency: Intermittent

Direction: Northbound

Queue Population: 20 to 25 vpl

Number of Lanes: 1

Note: During one observation, vehicles were queued in the dedicated left-turn lane at the I-75 northbound ramp.

SA

Congestion Type: Surveyed Cross Road Signal Queue

Location: SR 138

Frequency: Peak Hour

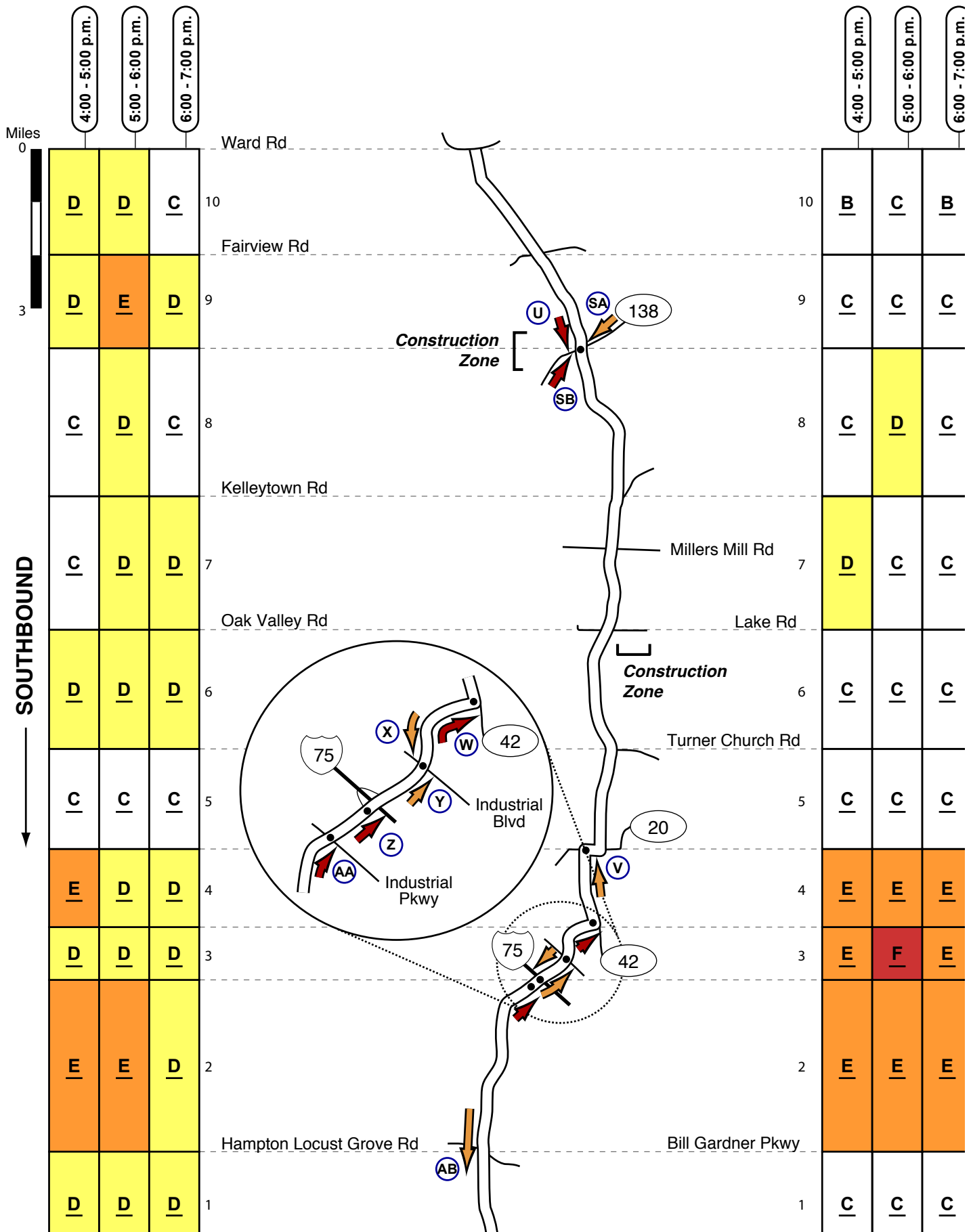
Direction: Westbound

Queue Population: 25 to 50 vpl

Number of Lanes: 1

Note: It appeared that ongoing construction at the intersection contributed to the congestion.

SR 155 (DeKalb & Henry Counties) - Evening



SR 155 (DeKalb & Henry Counties) - Evening**U**

Congestion Type: Mainline Signal Queue
Location: SR 138
Frequency: Peak Hour
Direction: Southbound
Queue Population: 20 to 40 vpl
Number of Lanes: 1

V

Congestion Type: Mainline Signal Queue
Location: SR 20
Frequency: Intermittent
Direction: Northbound
Queue Population: 20 to 30 vpl
Number of Lanes: 1

W

Congestion Type: Mainline Signal Queue
Location: SR 42
Frequency: Most Observations
Direction: Northbound
Queue Population: 20 to 80 vpl
Number of Lanes: 1

X

Congestion Type: Mainline Signal Queue
Location: Industrial Blvd
Frequency: Intermittent
Direction: Southbound
Queue Population: 20 to 25 vpl
Number of Lanes: 1

Y

Congestion Type: Mainline Signal Queue
Location: Industrial Blvd
Frequency: Intermittent
Direction: Northbound
Queue Population: 20 to 30 vpl
Number of Lanes: 1

Z

Congestion Type: Mainline Signal Queue
Location: I-75
Frequency: Most Observations
Direction: Northbound
Queue Population: 20 to 30 vpl
Number of Lanes: 1

AA

Congestion Type: Mainline Signal Queue
Location: Industrial Parkway
Frequency: Most observations
Direction: Northbound
Queue Population: 20 to 30 vpl
Number of Lanes: 1

AB

Congestion Type: Platoons
Location: Vicinity of Bill Gardner Pkwy
Frequency: Intermittent
Direction: Southbound
Platoon Population: 25 to 30 vpl
Number of Lanes: 1

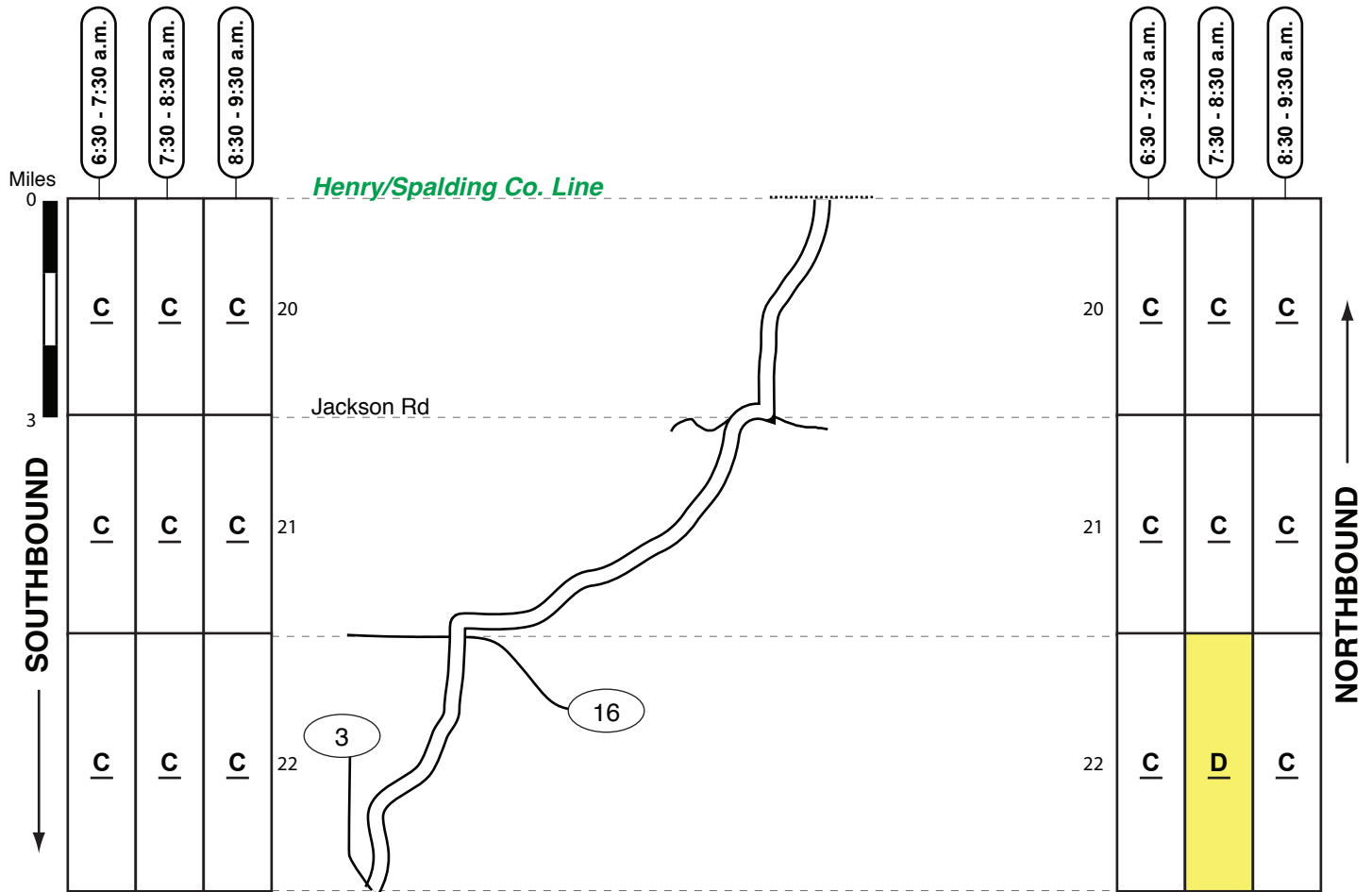
SA

Congestion Type: Surveyed Cross Road Signal Queue
Location: SR 138
Frequency: Intermittent
Direction: Westbound
Queue Population: 25 to 45 vpl
Number of Lanes: 1
Note: It appeared that ongoing construction at the intersection contributed to the congestion.

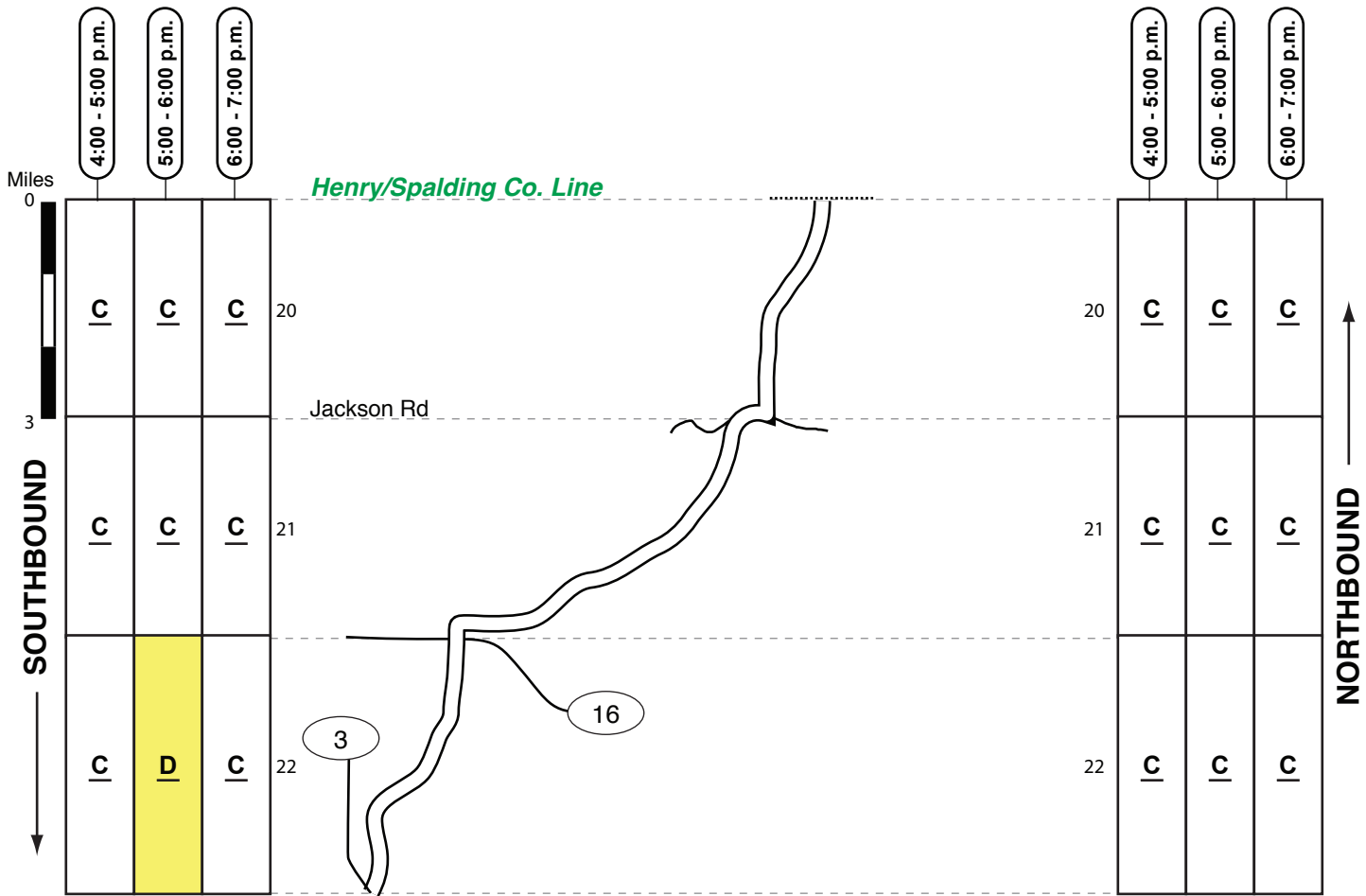
SB

Congestion Type: Surveyed Cross Road Signal Queue
Location: SR 138
Frequency: Most Observations
Direction: Eastbound
Queue Population: 20 to 30 vpl
Number of Lanes: 1

SR 155 (Spalding County) - Morning



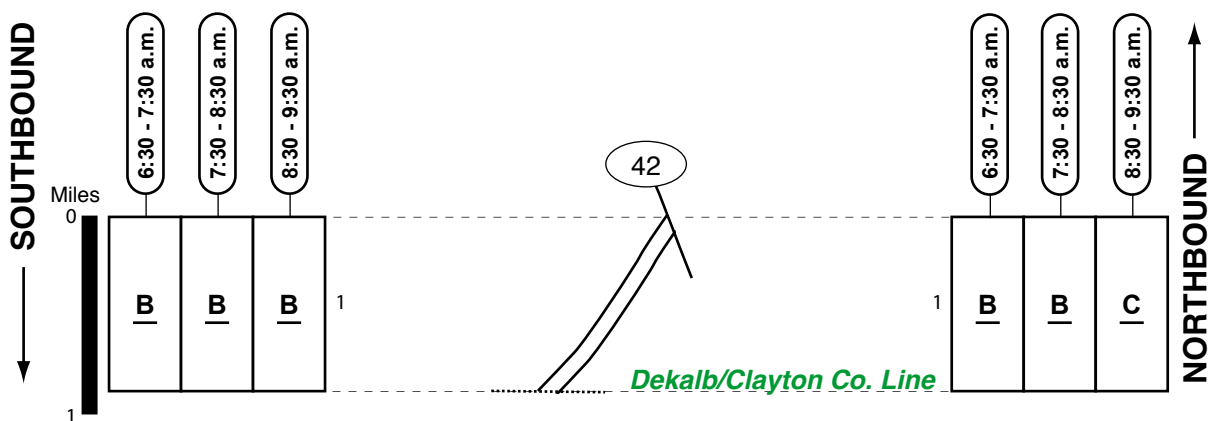
Spring/Fall 2010
SR 155 (Spalding County) - Evening



Arterial LOS Legend

| | | | | | |
|------------|-------|----------|-------|-----------|--------|
| A | B | C | D | E | F |
| Very Light | Light | Moderate | Heavy | Congested | Severe |

SR 160 (DeKalb County) - Morning

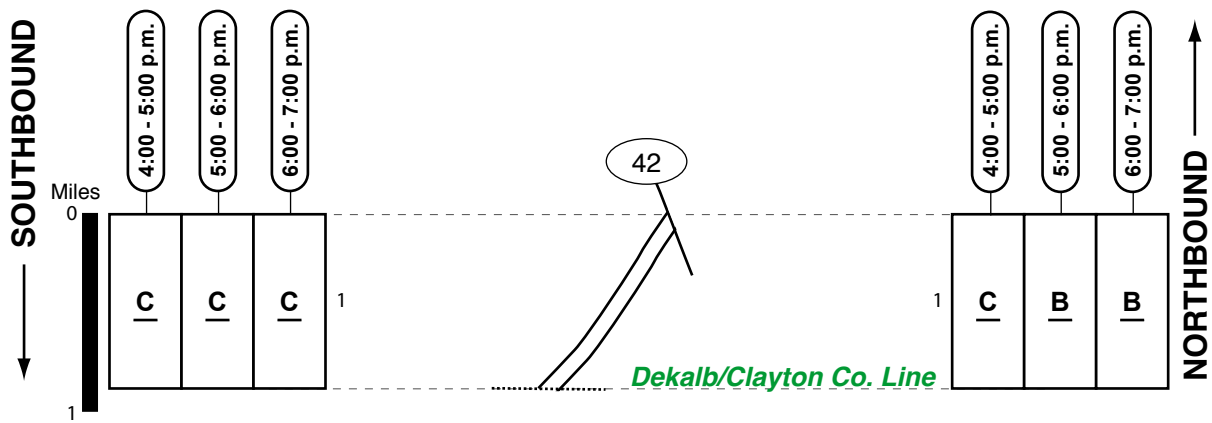


Arterial LOS Legend

| A | B | C | D | E | F |
|------------|-------|----------|-------|-----------|--------|
| Very Light | Light | Moderate | Heavy | Congested | Severe |

Spring 2010

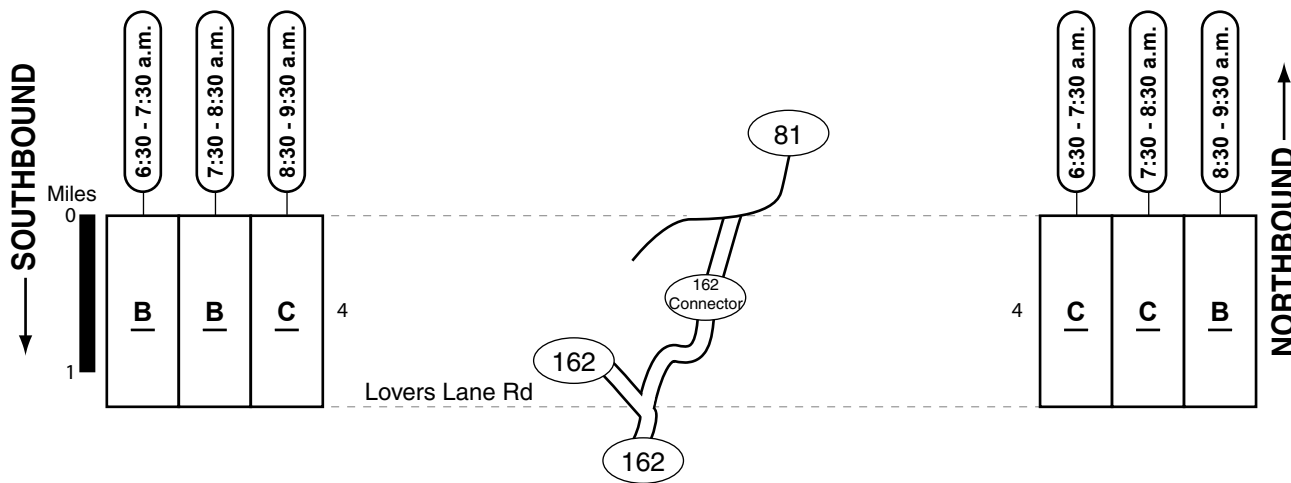
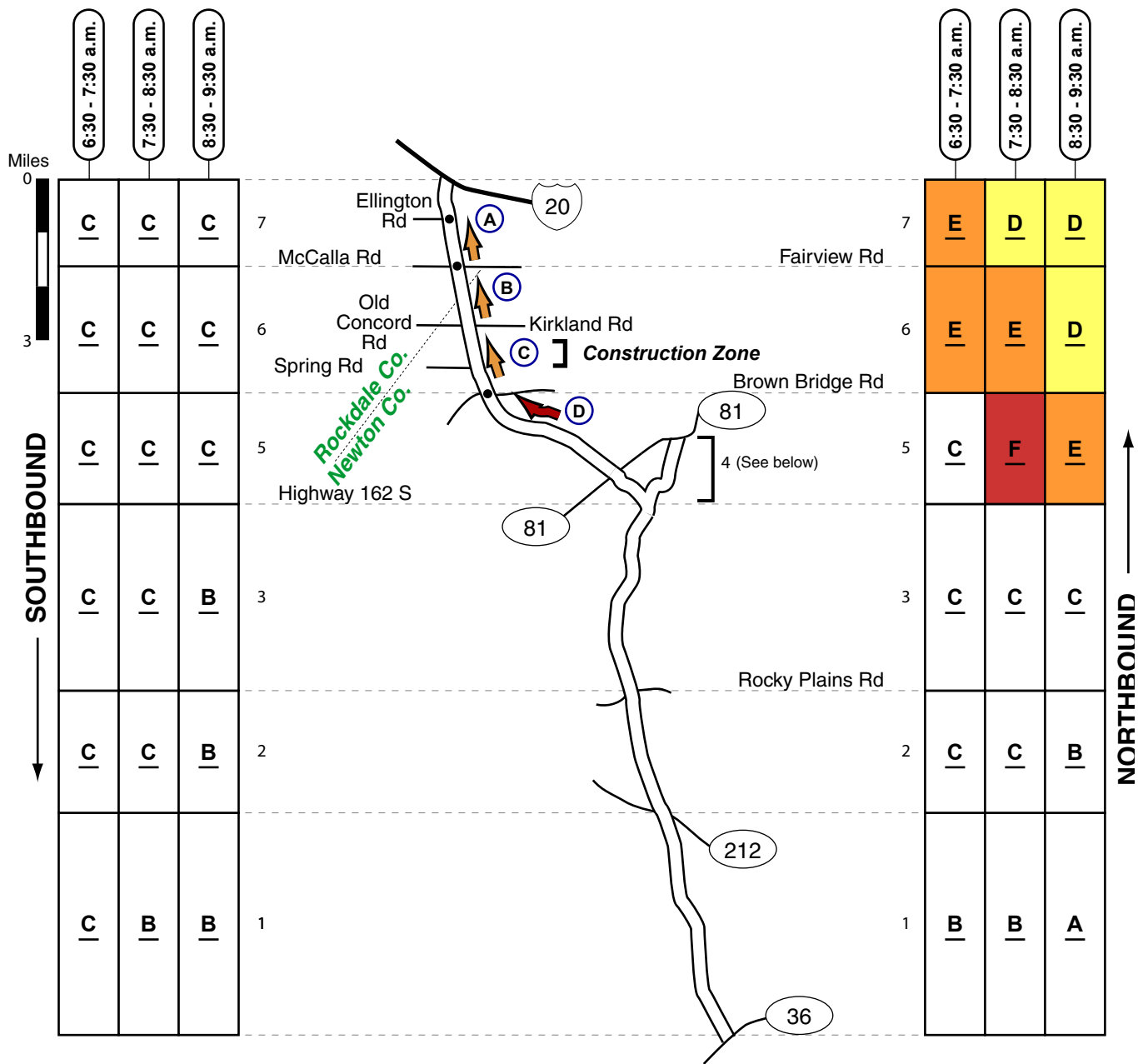
SR 160 (DeKalb County) - Evening



Arterial LOS Legend

| | | | | | |
|------------|----------|----------|----------|-----------|----------|
| A | B | C | D | E | F |
| Very Light | Light | Moderate | Heavy | Congested | Severe |

SR 162 (Rockdale & Newton Counties) - Morning



Arterial LOS Legend

| A | B | C | D | E | F |
|------------|-------|----------|-------|-----------|--------|
| Very Light | Light | Moderate | Heavy | Congested | Severe |

SR 162 (Rockdale & Newton Counties) - Morning

A

Congestion Type: Mainline Signal Queue

Location: Ellington Rd

Frequency: Intermittent

Direction: Northbound

Queue Population: 20 to 25 vpl

Number of Lanes: 1

B

Congestion Type: Mainline Signal Queue/Platoons

Location: McCalla Rd

Frequency: Intermittent

Direction: Northbound

Queue Population: 20 to 30 vpl

Number of Lanes: 1

C

Congestion Type: Mainline Signal Queue/Platoons

Location: Spring Rd & Kirkland Rd

Frequency: Intermittent

Direction: Northbound

Queue Population: 20 to 30 vpl

Number of Lanes: 1

D

Congestion Type: Mainline Signal Queue

Location: Brown Bridge Rd

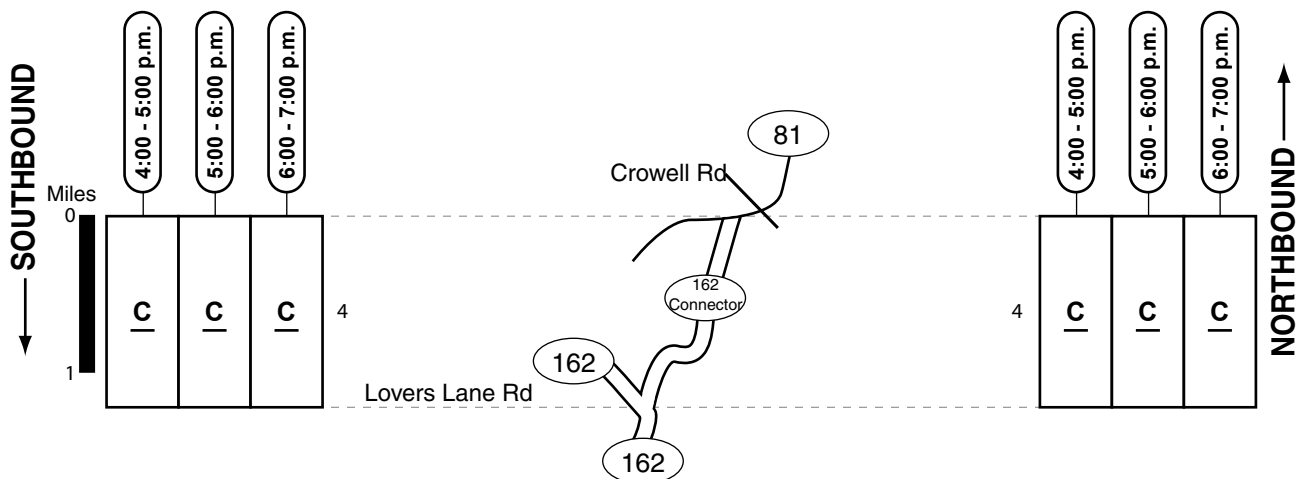
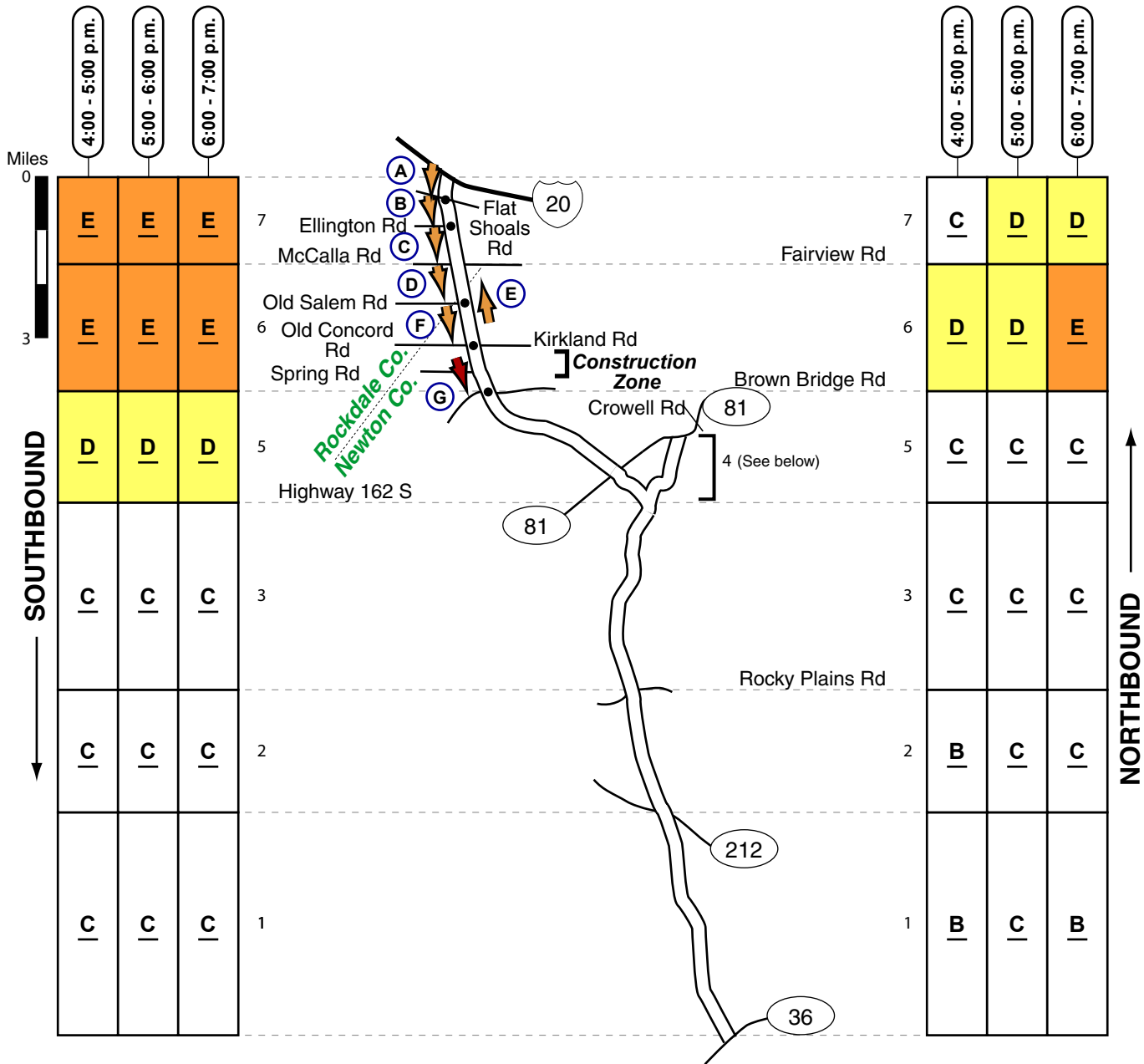
Frequency: Most Observations

Direction: Northbound

Queue Population: 20 to 70 vpl

Number of Lanes: 1

SR 162 (Rockdale & Newton Counties) - Evening



Arterial LOS Legend

| A | B | C | D | E | F |
|------------|-------|----------|-------|-----------|--------|
| Very Light | Light | Moderate | Heavy | Congested | Severe |

SR 162 (Rockdale & Newton Counties) - Evening

A

Congestion Type: Mainline Signal Queue

Location: Flat Shoals Rd

Frequency: Intermittent

Direction: Southbound

Queue Population: 20 to 30 vpl

Number of Lanes: 2

Note: During most observations, congestion was found primarily in the left lane of two; the right lane dropped approximately 200 yards south of the signal.

B

Congestion Type: Mainline Signal Queue

Location: Ellington Rd

Frequency: Intermittent

Direction: Southbound

Queue Population: 20 to 30 vpl

Number of Lanes: 1

C

Congestion Type: Mainline Signal Queue

Location: McCalla Rd

Frequency: Intermittent

Direction: Southbound

Queue Population: 20 to 30 vpl

Number of Lanes: 1

D

Congestion Type: Mainline Signal Queue

Location: Old Salem Rd

Frequency: Intermittent

Direction: Southbound

Queue Population: 20 to 30 vpl

Number of Lanes: 1

E

Congestion Type: Platoons

Location: Between Brown Bridge Rd & Fairview Rd

Frequency: Intermittent

Direction: Northbound

Platoon Population: 20 to 30 vpl

Number of Lanes: 1

Note: Northbound congestion was intermittently found at Spring Rd and the signal at McCalla Rd; construction at the Spring St intersection may have contributed to congestion there.

F

Congestion Type: Mainline Signal Queue

Location: Kirkland Rd

Frequency: Intermittent

Direction: Southbound

Queue Population: 20 to 30 vpl

Number of Lanes: 1

G

Congestion Type: Mainline Signal Queue

Location: Brown Bridge Rd

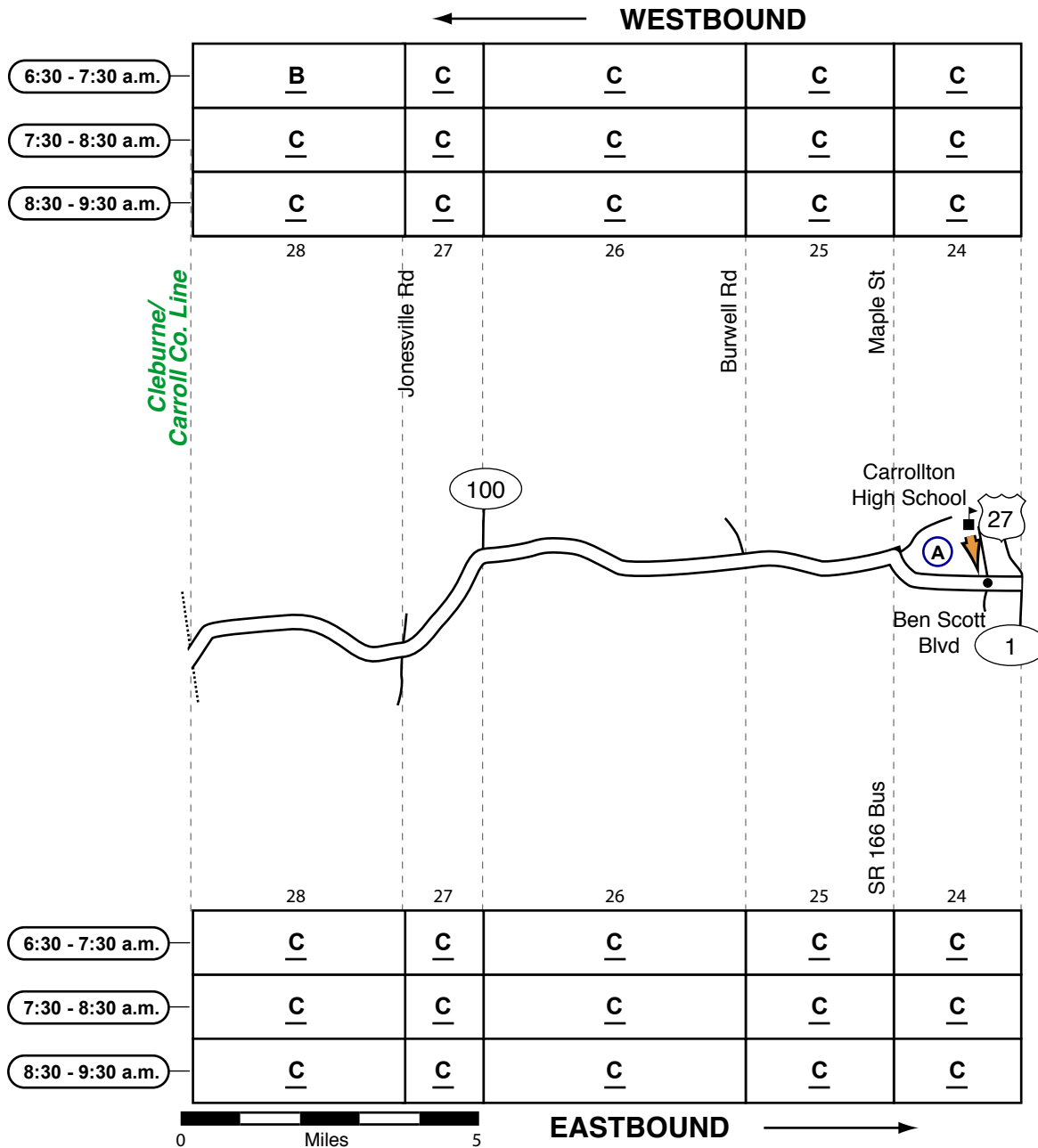
Frequency: Peak Hour

Direction: Southbound

Queue Population: 20 to 40 vpl

Number of Lanes: 1

Spring 2010 SR 166 (Carroll County) - Morning

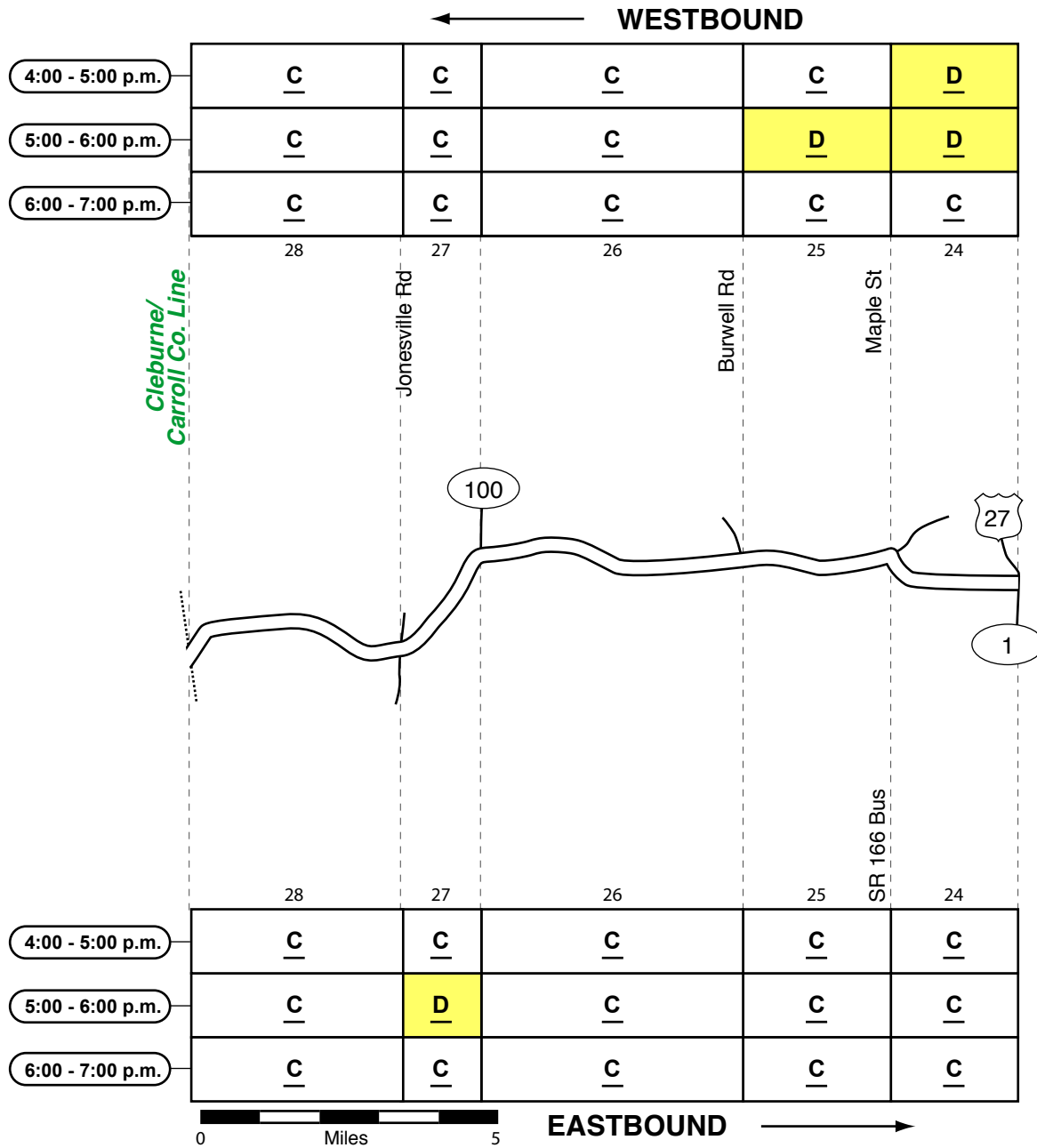


A
Congestion Type: Cross Road Signal Queue
Location: Ben Scott Blvd
Frequency: Intermittent
Direction: Southbound
Queue Population: 20 to 30 vpl
Number of Lanes: 1
Note: Southbound congestion on Ben Scot Blvd appeared to be related to scholl traffic at Carrollton High School; congestion was found on two mornings during observations at 7:38 a.m.

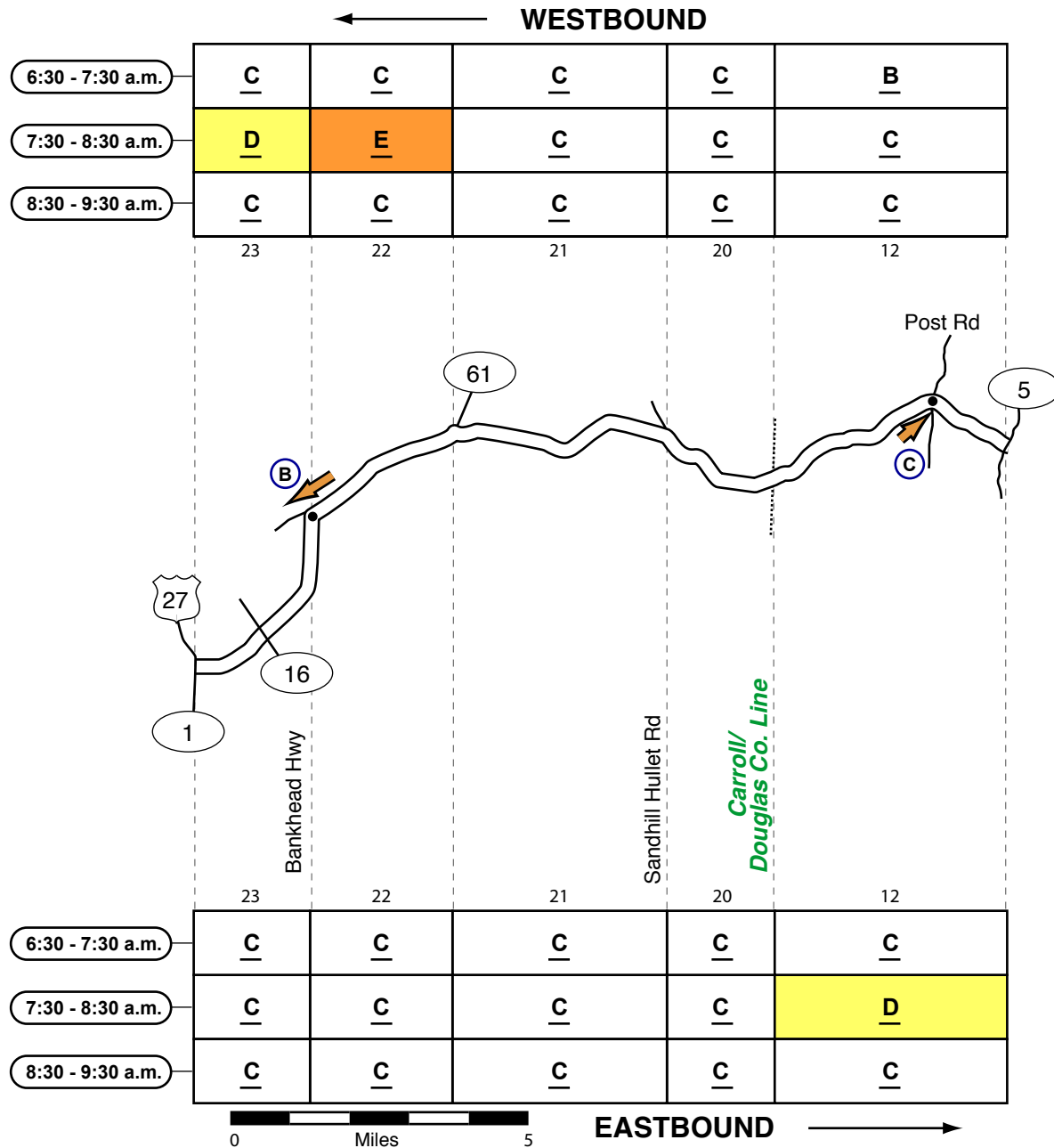
Arterial LOS Legend

| A | B | C | D | E | F |
|------------|-------|----------|-------|-----------|--------|
| Very Light | Light | Moderate | Heavy | Congested | Severe |

SR 166 (Carroll County) - Evening



SR 166 (Carroll County) - Morning



B

Congestion Type: Mainline Signal Queue
 Location: Bankhead Hwy / SR 166 Business
 Frequency: Intermittent
 Direction: Westbound
 Queue Population: 20 to 30 vpl
 Number of Lanes: 2

Note: During one observation, congestion was limited to the left lane on SR 166 where vehicles waited to enter the left-turn bay at the signal.

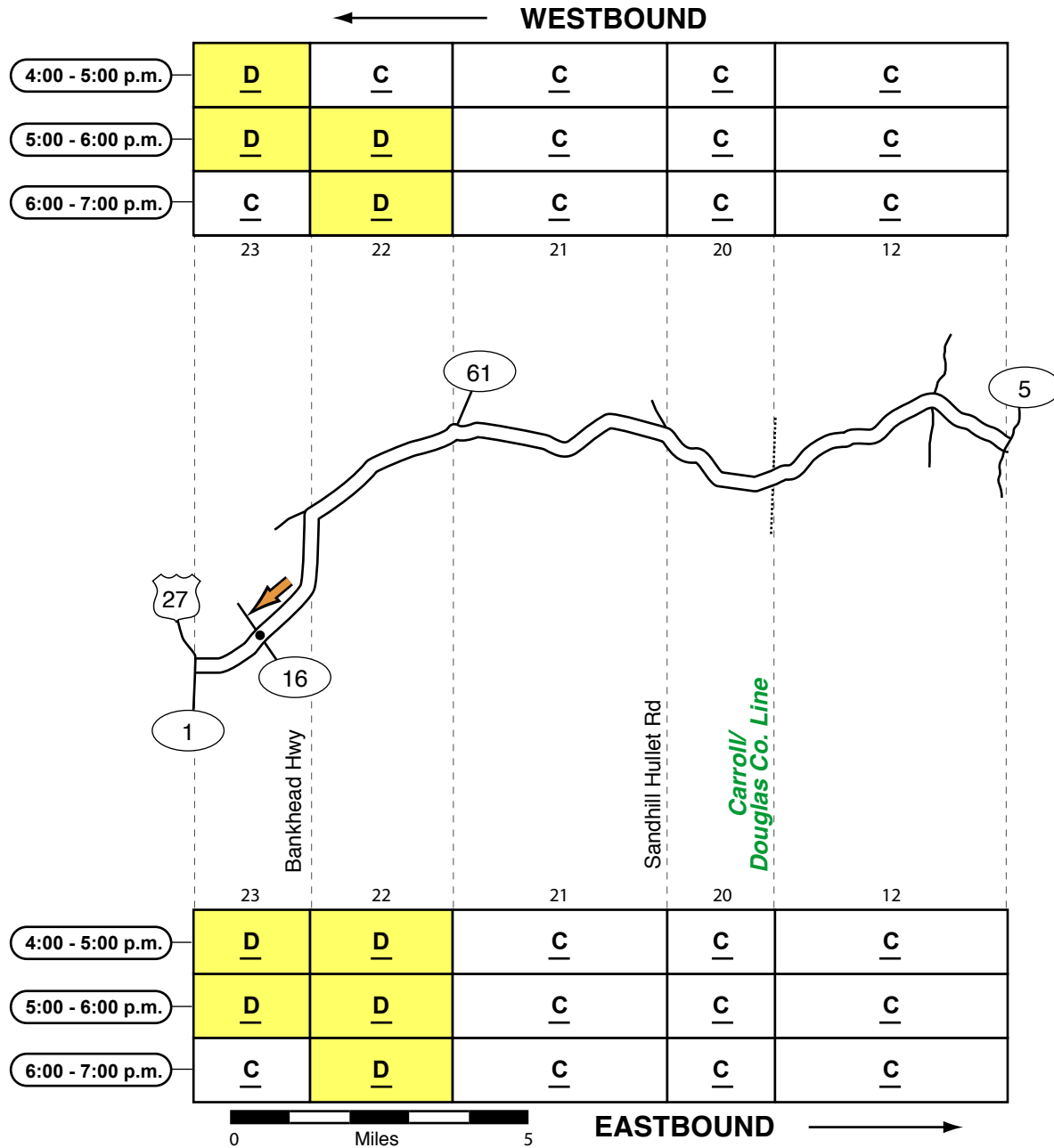
C

Congestion Type: Mainline Signal Queue
 Location: Post Rd
 Frequency: One Time Only
 Direction: Eastbound
 Queue Population: 20 to 25 vpl
 Number of Lanes: 1

Arterial LOS Legend

| A | B | C | D | E | F |
|------------|-------|----------|-------|-----------|--------|
| Very Light | Light | Moderate | Heavy | Congested | Severe |

SR 166 (Carroll County) - Evening



A

Congestion Type: Left-Turn Queue

Location: SR 16

Frequency: Intermittent

Direction: Westbound

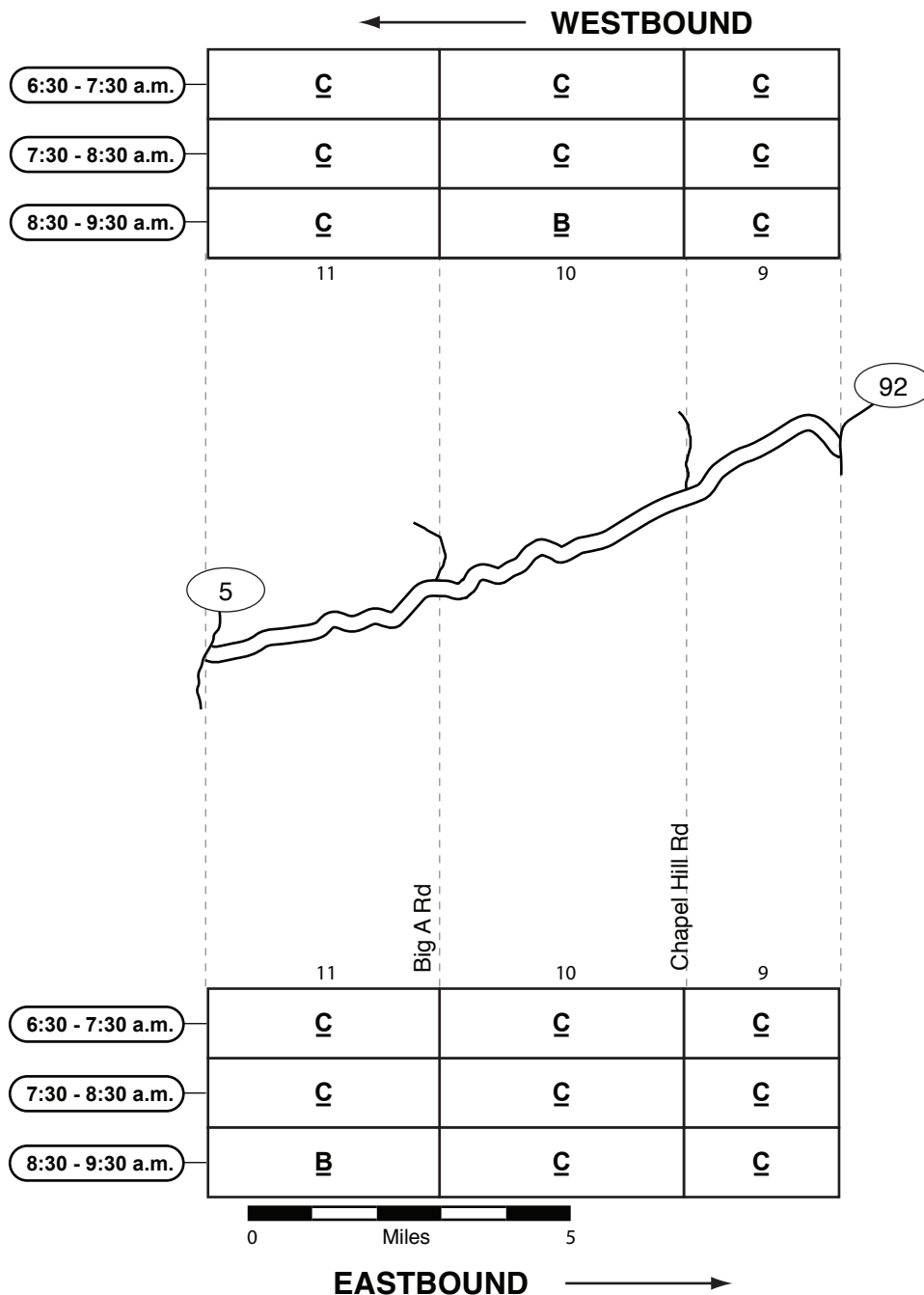
Queue Population: 20 to 40 vpl

Number of Lanes: 1

Arterial LOS Legend

| | | | | | |
|------------|----------|----------|----------|-----------|----------|
| <u>A</u> | <u>B</u> | <u>C</u> | <u>D</u> | <u>E</u> | <u>F</u> |
| Very Light | Light | Moderate | Heavy | Congested | Severe |

SR 166 (Douglas County) - Morning

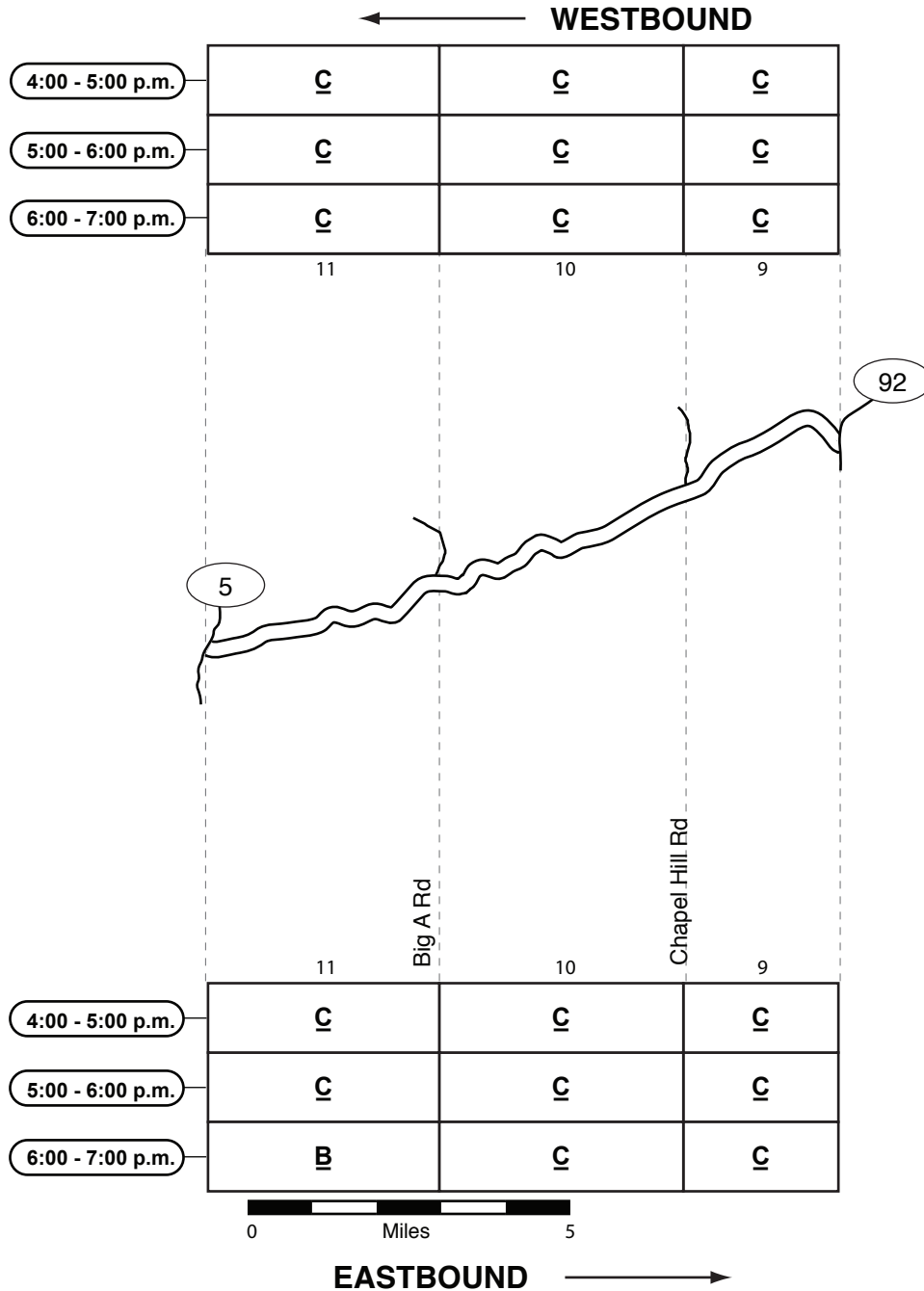


Arterial LOS Legend

| | | | | | |
|------------|----------|----------|----------|-----------|----------|
| <u>A</u> | <u>B</u> | <u>C</u> | <u>D</u> | <u>E</u> | <u>F</u> |
| Very Light | Light | Moderate | Heavy | Congested | Severe |

Spring 2010

SR 166 (Douglas County) - Evening

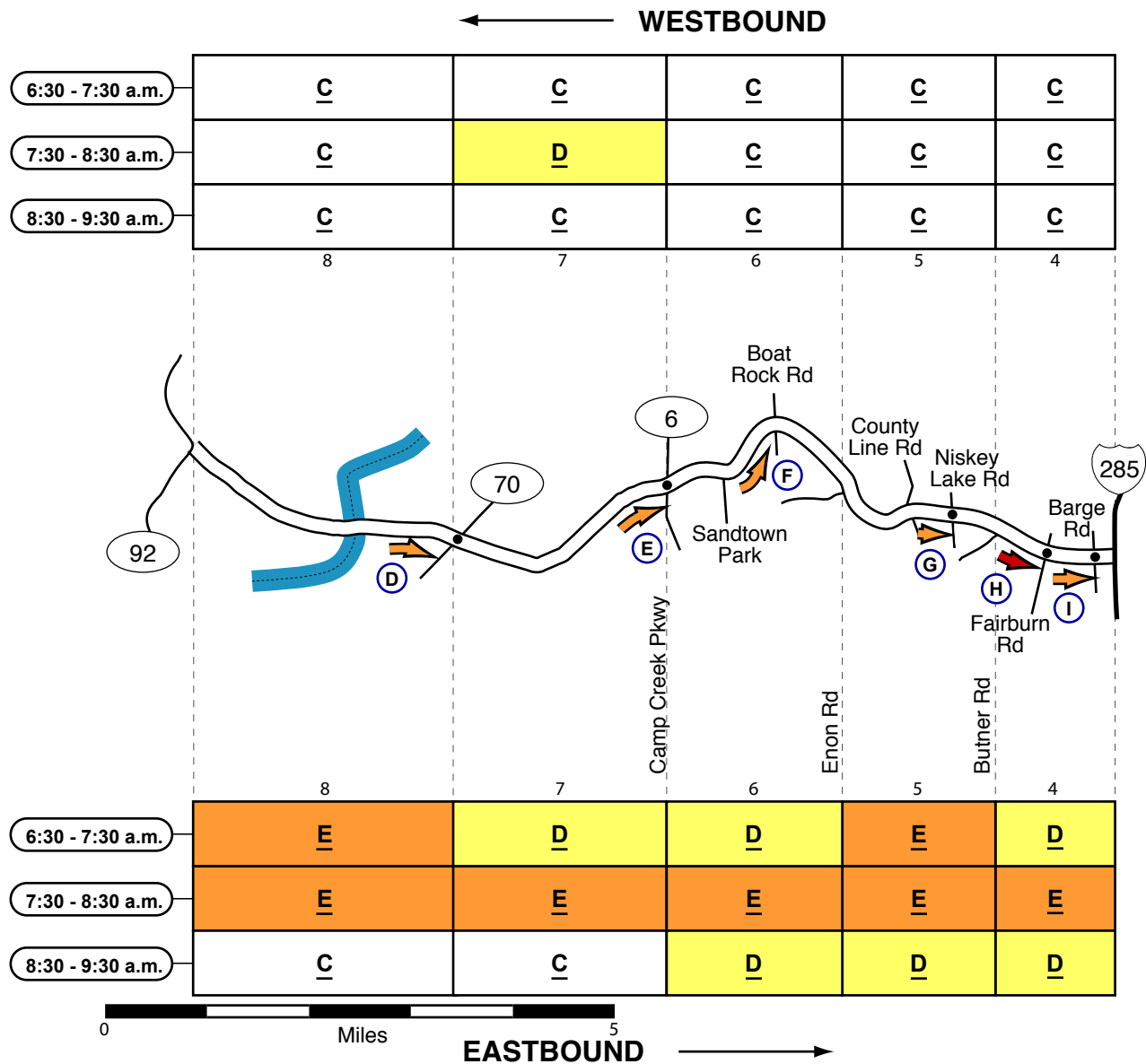


Arterial LOS Legend

| | | | | | |
|------------|----------|----------|----------|-----------|----------|
| <u>A</u> | <u>B</u> | <u>C</u> | <u>D</u> | <u>E</u> | <u>F</u> |
| Very Light | Light | Moderate | Heavy | Congested | Severe |

Spring 2010

SR 166 (Fulton County) - Morning



Arterial LOS Legend

| A | B | C | D | E | F |
|------------|-------|----------|-------|-----------|--------|
| Very Light | Light | Moderate | Heavy | Congested | Severe |

SR 166 (Fulton County) - Morning

D

Congestion Type: Mainline Signal Queue

Location: SR 70 (Fulton Industrial Pkwy)

Frequency: Intermittent

Direction: Eastbound

Queue Population: 20 to 40 vpl

Number of Lanes: 1

E

Congestion Type: Mainline Signal Queue

Location: SR 6 (Camp Creek Pkwy)

Frequency: Intermittent

Direction: Eastbound

Queue Population: 20 to 30 vpl

Number of Lanes: 1

F

Congestion Type: Platoons

Location: Between Camp Creek Pkwy & Enon Rd

Frequency: Intermittent

Direction: Eastbound

Queue Population: 25 to 30 vpl

Number of Lanes: 1

Note: Vehicles waiting to turn left at Boat Rock Rd (no signal - waiting for gap in westbound traffic) may have contributed to the formation of the platoons.

G

Congestion Type: Mainline Signal Queue

Location: Niskey Lake Rd

Frequency: Intermittent

Direction: Eastbound

Queue Population: 20 to 30 vpl

Number of Lanes: 1

H

Congestion Type: Mainline Signal Queue

Location: Fairburn Rd

Frequency: Peak Hour

Direction: Eastbound

Queue Population: 20 to 40 vpl

Number of Lanes: 2

I

Congestion Type: Mainline Signal Queue

Location: Barge Rd

Frequency: Intermittent

Direction: Eastbound

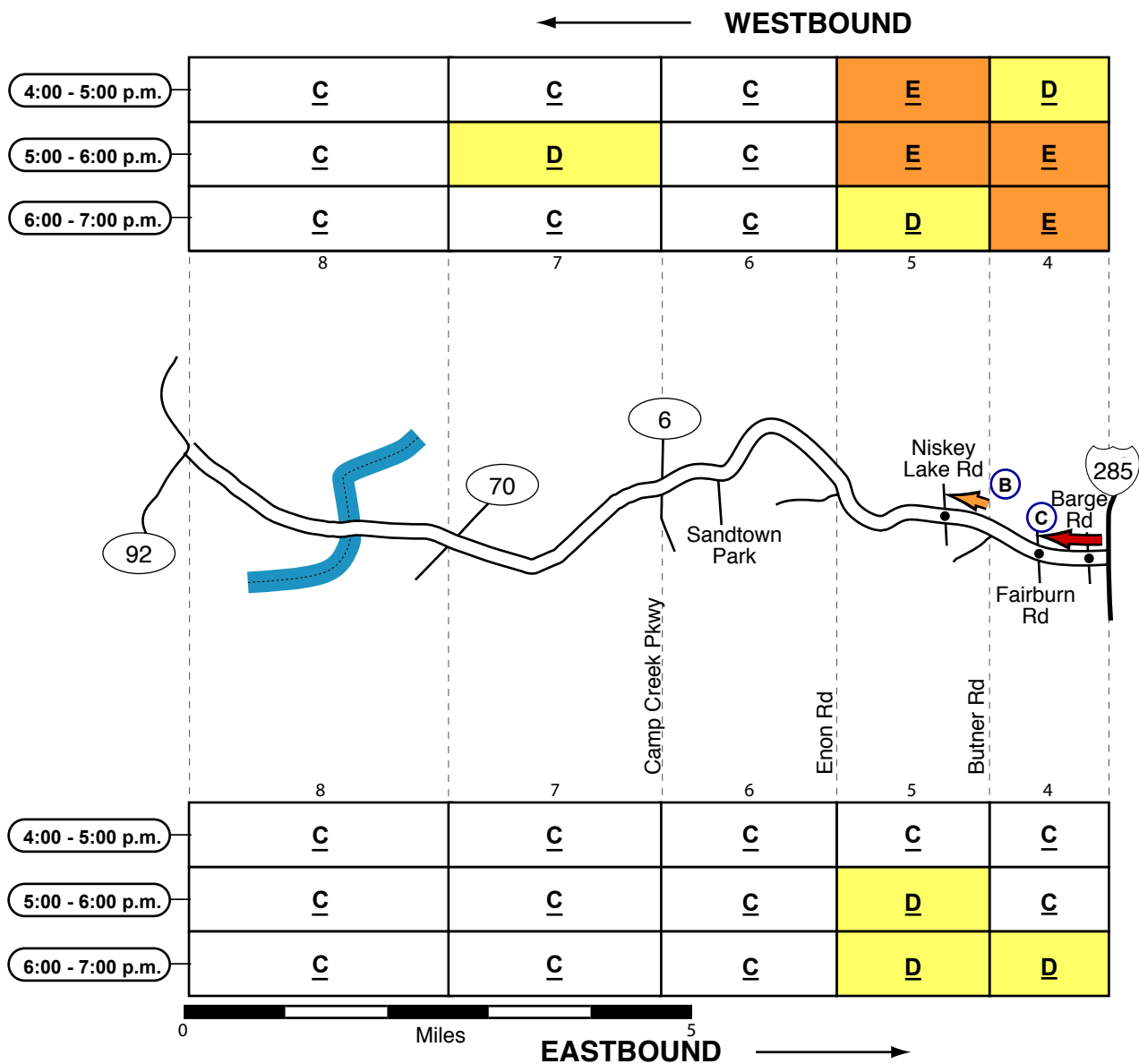
Queue Population: 20 to 30 vpl

Number of Lanes: 2

Arterial LOS Legend

| <u>A</u> | <u>B</u> | <u>C</u> | <u>D</u> | <u>E</u> | <u>F</u> |
|------------|----------|----------|----------|-----------|----------|
| Very Light | Light | Moderate | Heavy | Congested | Severe |

Spring 2010 SR 166 (Fulton County) - Evening



Arterial LOS Legend

| A | B | C | D | E | F |
|------------|-------|----------|-------|-----------|--------|
| Very Light | Light | Moderate | Heavy | Congested | Severe |

Spring 2010

SR 166 (Fulton County) - Evening

PERFORMANCE RATINGS | 327

B

Congestion Type: Mainline Signal Queue

Location: Niskey Lake Rd

Frequency: Intermittent

Direction: Westbound

Queue Population: 20 to 30 vpl

Number of Lanes: 1

C

Congestion Type: Mainline Signal Queue

Location: Fairburn Rd

Frequency: Peak Hour

Direction: Westbound

Queue Population: 20 to 60 vpl

Number of Lanes: 2

Note: During several observations, eastbound congestion approaching Fairburn Rd extended back through the upstream signal at Barge Rd.

Arterial LOS Legend

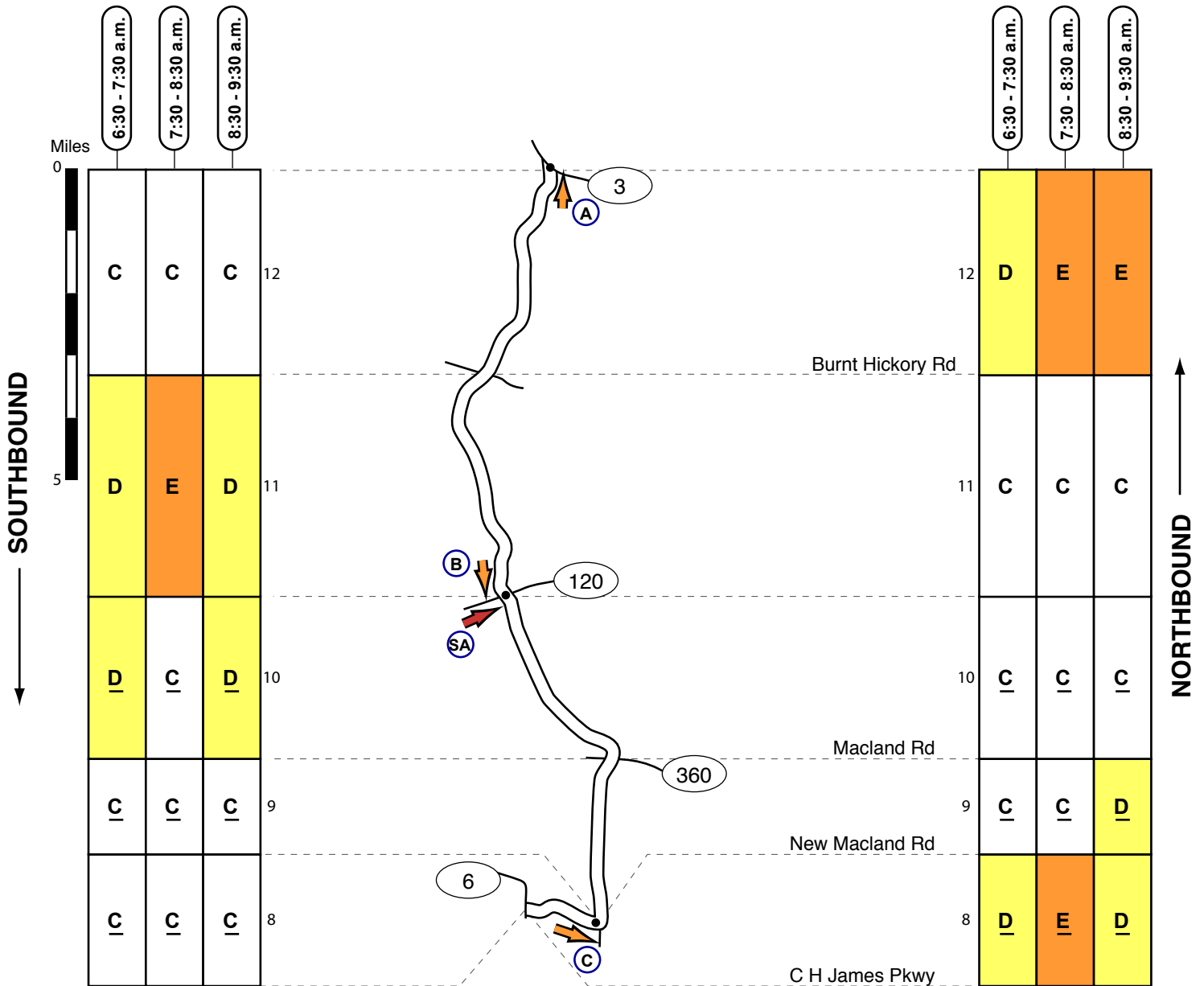
| <u>A</u> | <u>B</u> | <u>C</u> | <u>D</u> | <u>E</u> | <u>F</u> |
|------------|----------|----------|----------|-----------|----------|
| Very Light | Light | Moderate | Heavy | Congested | Severe |

(Blank)

Spring 2010 SR 176 (Cobb County) - Morning

PERFORMANCE RATINGS

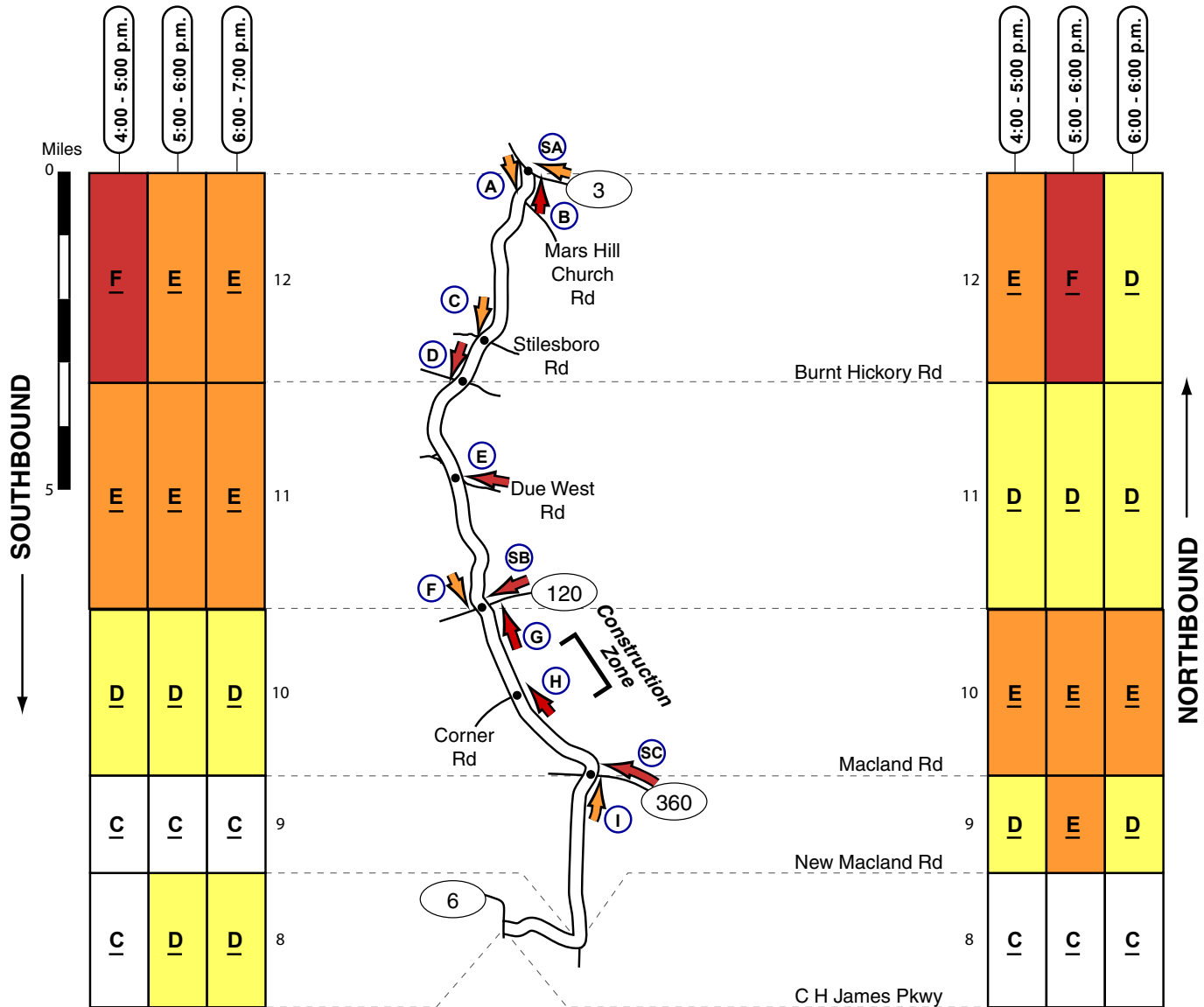
329



Arterial LOS Legend

| A | B | C | D | E | F |
|------------|-------|----------|-------|-----------|--------|
| Very Light | Light | Moderate | Heavy | Congested | Severe |

SR 176 (Cobb County) - Evening



SR 176 (Cobb County) - Evening

A

Congestion Type: Mainline Queue
 Location: Mars Hill Church Rd
 Frequency: Intermittent
 Direction: Southbound
 Queue Population: 20 to 40 vpl
 Number of Lanes: 1
 Note: Congestion appeared to be caused by left-turning vehicles waiting for gaps in northbound traffic. During the 2010 survey, a new intersection was being constructed at SR 176 and Mars Hill Church Rd.

B

Congestion Type: Mainline Signal Queue
 Location: SR 3
 Frequency: Peak Hour
 Direction: Northbound
 Queue Population: 20 to 50 vpl
 Number of Lanes: 1
 Note: During one observation, approximately 100 vehicles were queued at the signal.

C

Congestion Type: Mainline Signal Queue
 Location: Stilesboro Rd
 Frequency: Intermittent
 Direction: Southbound
 Queue Population: 20 to 30 vpl
 Number of Lanes: 1

D

Congestion Type: Mainline Signal Queue
 Location: Burnt Hickory Rd
 Frequency: Most Observations
 Direction: Southbound
 Queue Population: 20 to 50 vpl
 Number of Lanes: 1

E

Congestion Type: Cross Road Signal Queue
 Location: Due West Rd
 Frequency: Peak Hour
 Direction: Westbound
 Queue Population: 20 to 50 vpl
 Number of Lanes: 1

F

Congestion Type: Mainline Signal Queue
 Location: SR 120
 Frequency: Intermittent
 Direction: Southbound
 Queue Population: 20 to 30 vpl
 Number of Lanes: 1

G

Congestion Type: Mainline Signal Queue
 Location: SR 120
 Frequency: Most Observations
 Direction: Northbound
 Queue Population: 20 to 60 vpl
 Number of Lanes: 1

H

Congestion Type: Mainline Signal Queue
 Location: Corner Rd
 Frequency: Peak Hour
 Direction: Northbound
 Queue Population: 20 to 40 vpl
 Number of Lanes: 1
 Note: During the 2010 survey, a new intersection was being constructed at SR 176 and Corner Rd.

I

Congestion Type: Mainline Signal Queue
 Location: SR 360 (Macland Rd)
 Frequency: Intermittent
 Direction: Northbound
 Queue Population: 20 to 30 vpl
 Number of Lanes: 1

SA

Congestion Type: Surveyed Cross Road Signal Queue
 Location: SR 3
 Frequency: Intermittent
 Direction: Westbound
 Queue Population: 20 to 30 vpl
 Number of Lanes: 1
 Note: When congested, vehicles were queued in the left-turn bay.

SB

Congestion Type: Surveyed Cross Road Signal Queue
 Location: SR 120
 Frequency: Most Observations
 Direction: Westbound
 Queue Population: 20 to 60 vpl
 Number of Lanes: 2

SC

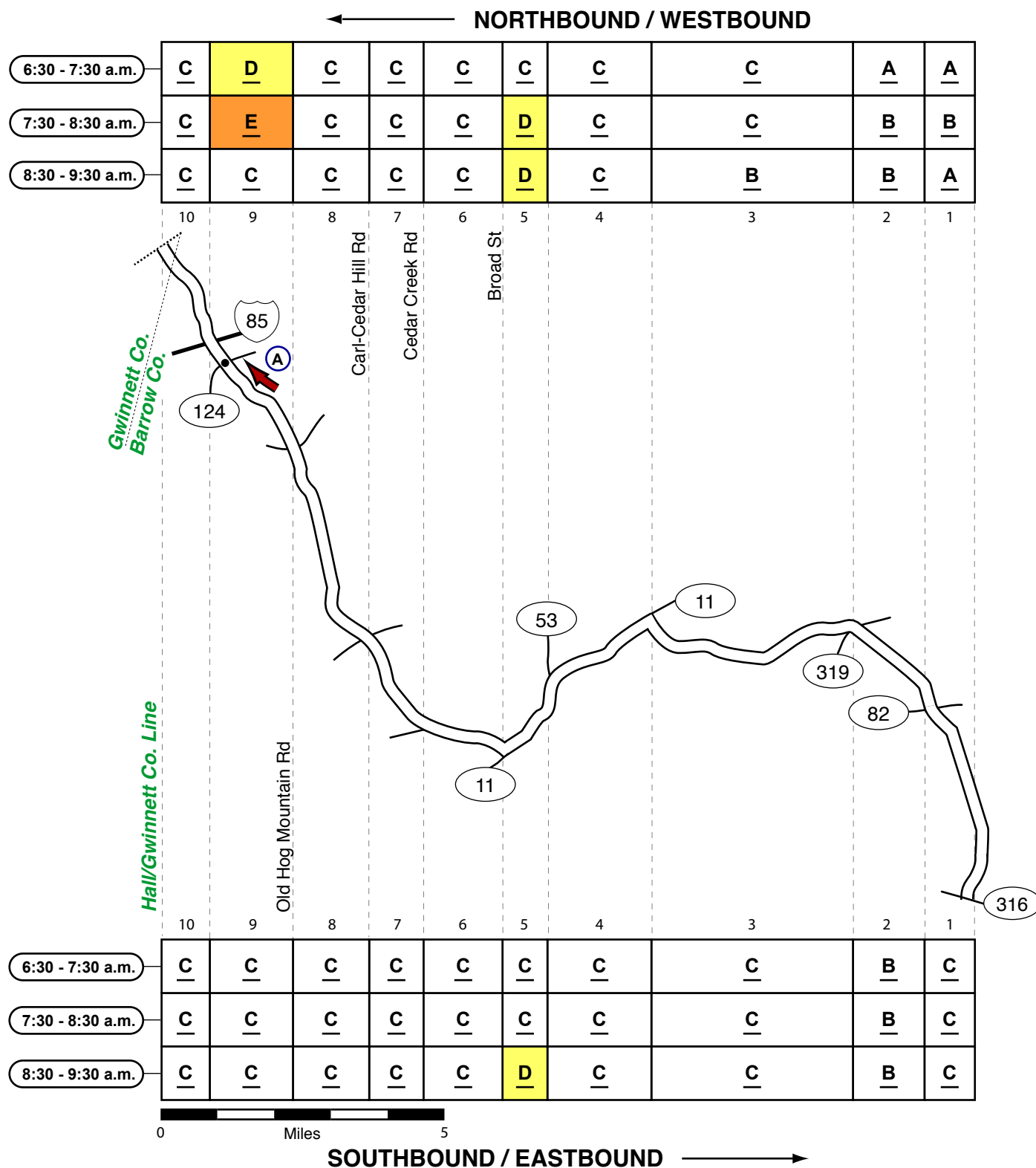
Congestion Type: Surveyed Cross Road Signal Queue
 Location: SR 360
 Frequency: Most Observations
 Direction: Westbound
 Queue Population: 20 to 40 vpl
 Number of Lanes: 1

Arterial LOS Legend

| A | B | C | D | E | F |
|------------|-------|----------|-------|-----------|--------|
| Very Light | Light | Moderate | Heavy | Congested | Severe |

Spring 2010

SR 211 (Barrow County) - Morning

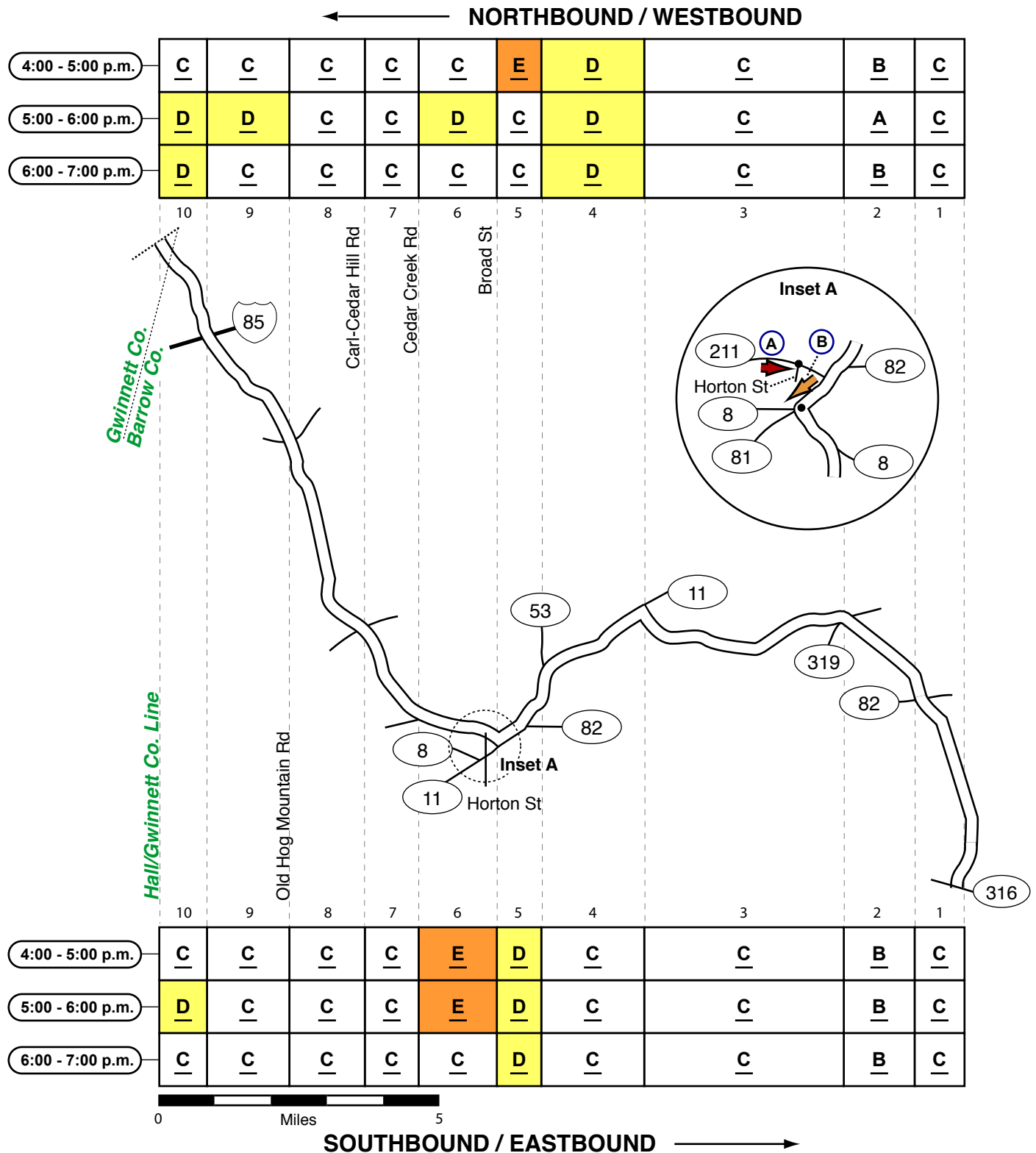


A
 Congestion Type: Mainline Signal Queue
 Location: SR 124
 Frequency: Peak Hour
 Direction: Northbound
 Queue Population: 20 to 50 vpl
 Number of Lanes: 1

Arterial LOS Legend

| | | | | | |
|------------|----------|----------|----------|-----------|----------|
| <u>A</u> | <u>B</u> | <u>C</u> | <u>D</u> | <u>E</u> | <u>F</u> |
| Very Light | Light | Moderate | Heavy | Congested | Severe |

SR 211 (Barrow County) - Evening



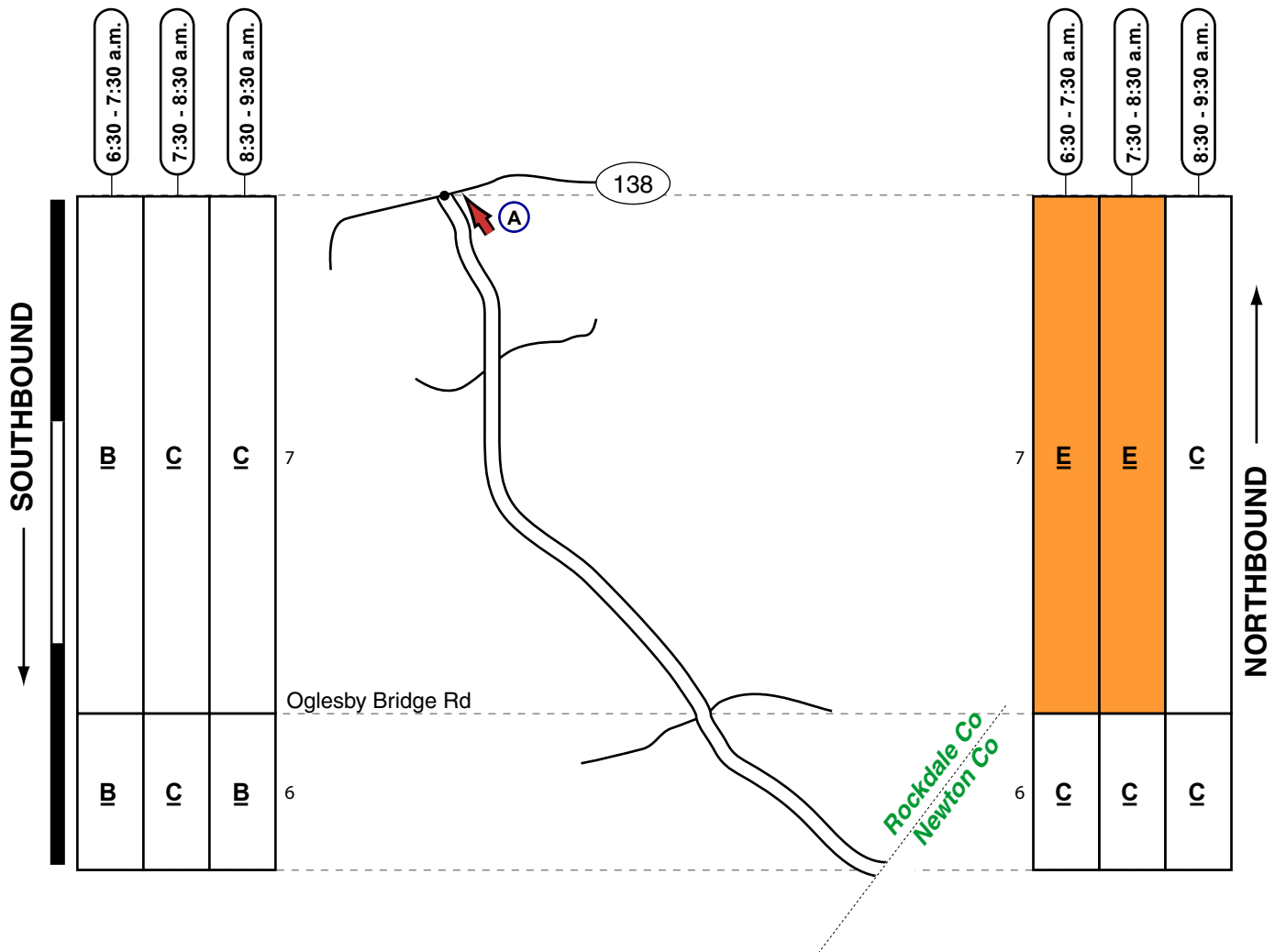
A
Congestion Type: Mainline Signal Queue
Location: Horton St
Frequency: Peak Hour
Direction: Eastbound
Queue Population: 20 to 40 vpl
Number of Lanes: 1

B
Congestion Type: Mainline Signal Queue
Location: SR 8
Frequency: Intermittent
Direction: Southbound
Queue Population: 20 to 30 vpl
Number of Lanes: 1

Arterial LOS Legend

| | | | | | |
|------------|----------|----------|----------|-----------|----------|
| <u>A</u> | <u>B</u> | <u>C</u> | <u>D</u> | <u>E</u> | <u>F</u> |
| Very Light | Light | Moderate | Heavy | Congested | Severe |

SR 212 (Rockdale County) - Morning



A

Congestion Type: Mainline Signal Queue

Location: SR 138

Frequency: Most observations between 7:00 and 8:00 a.m.

Direction: Northbound

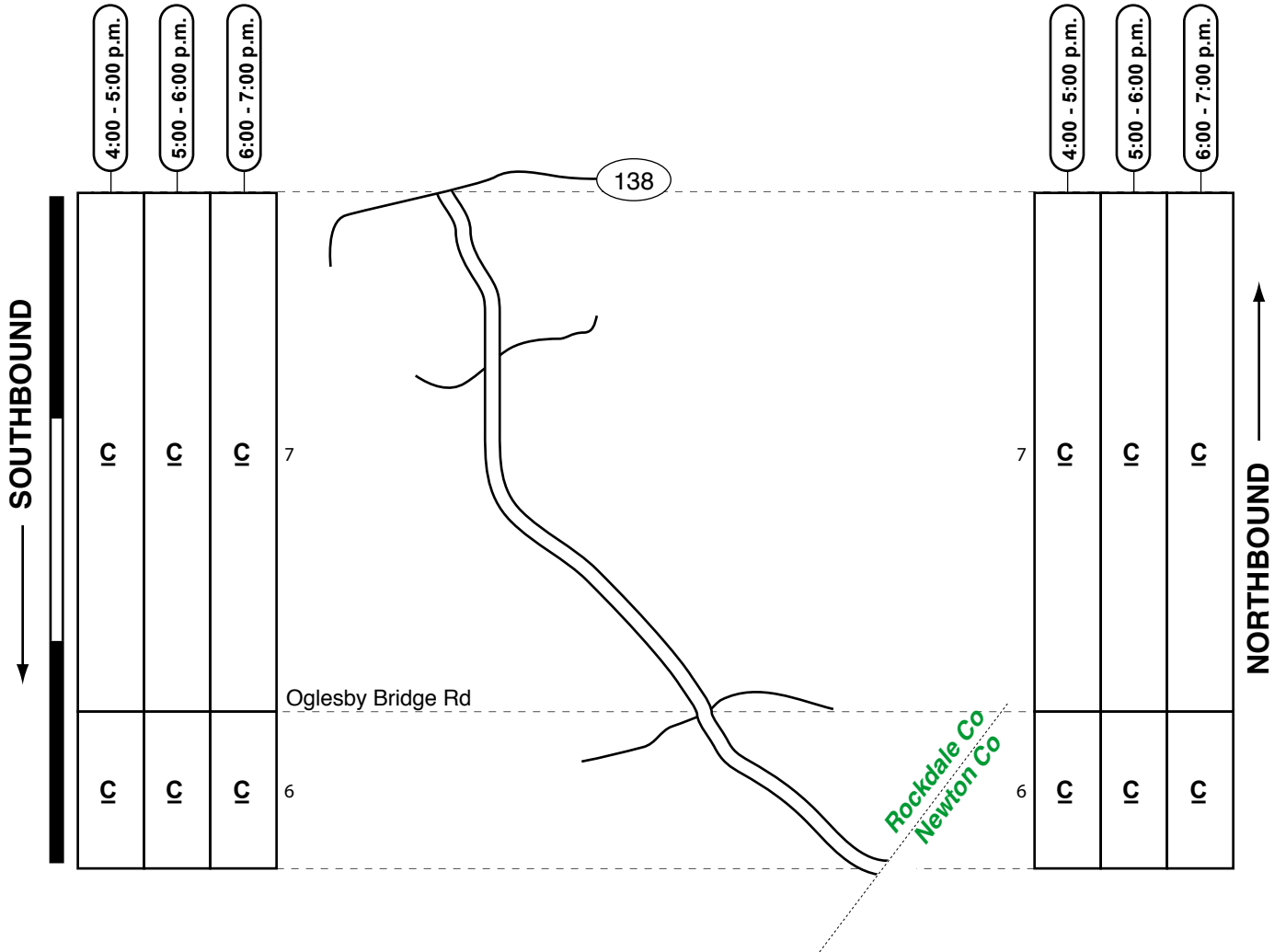
Queue Population: 20 to 40 vpl

Number of Lanes: 1

Arterial LOS Legend

| A | B | C | D | E | F |
|------------|-------|----------|-------|-----------|--------|
| Very Light | Light | Moderate | Heavy | Congested | Severe |

SR 212 (Rockdale County) - Evening

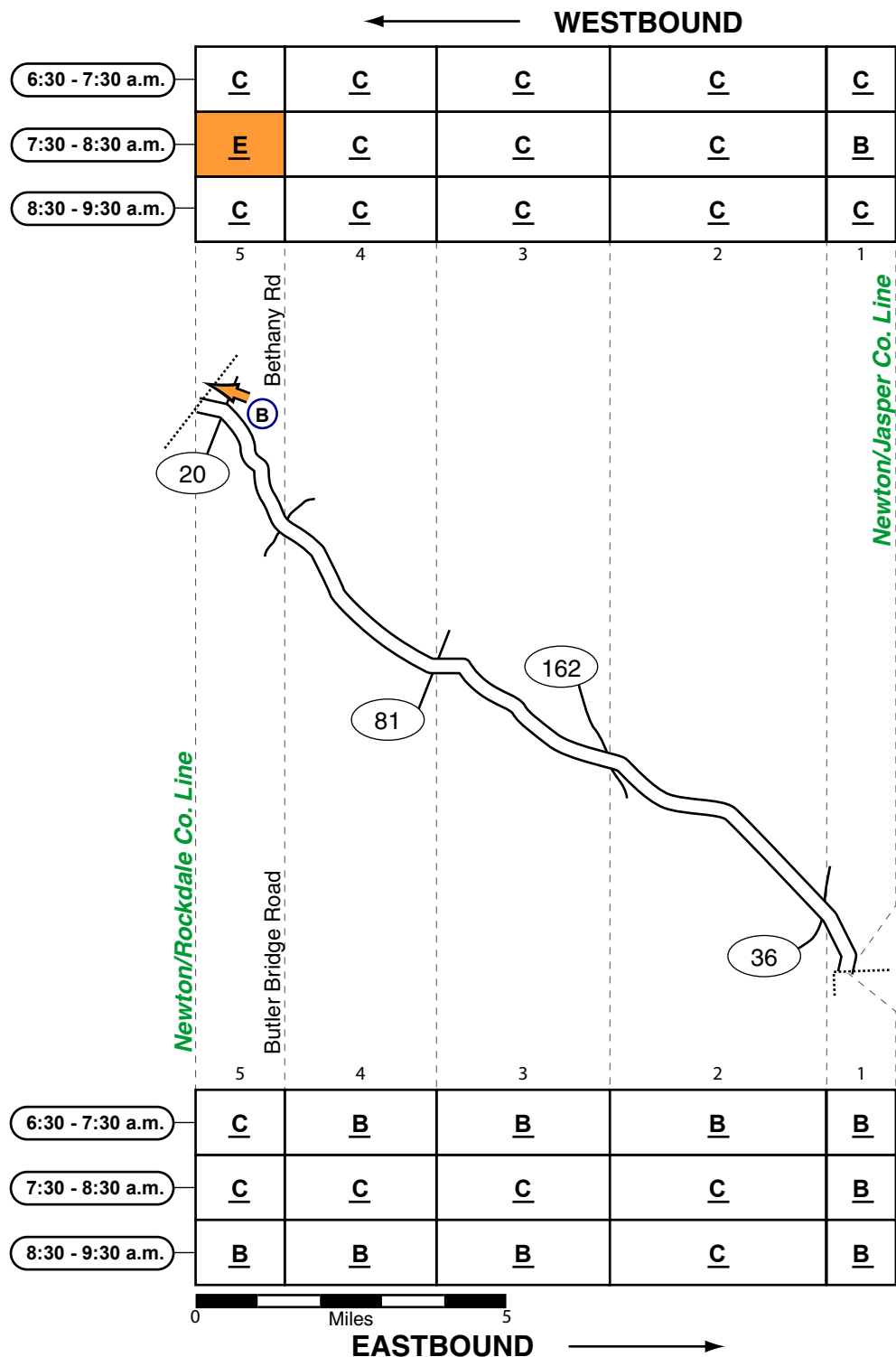


Arterial LOS Legend

| A | B | C | D | E | F |
|------------|-------|----------|-------|-----------|--------|
| Very Light | Light | Moderate | Heavy | Congested | Severe |

Spring 2010

SR 212 (Newton County) - Morning

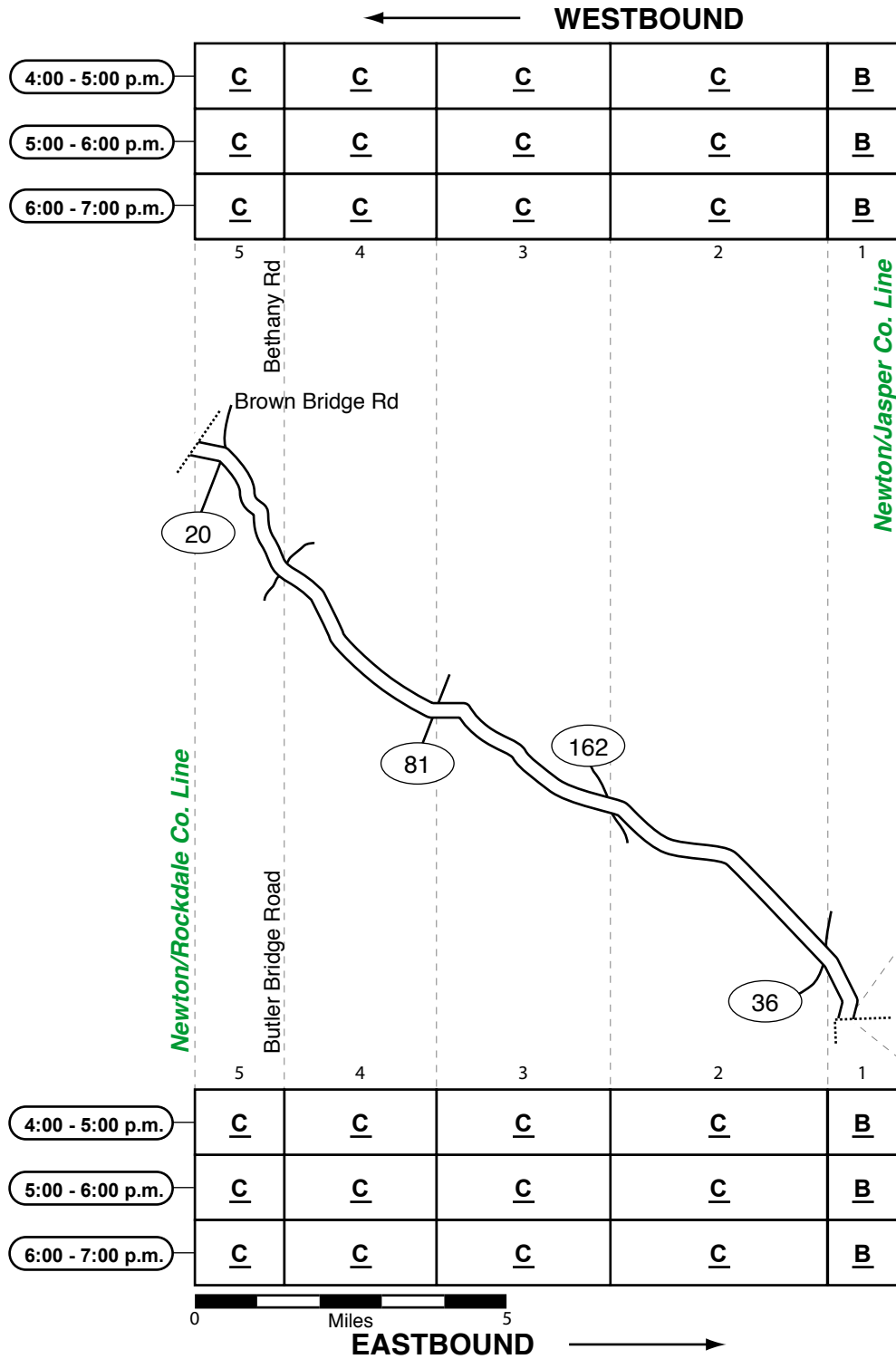


B
 Congestion Type: Platoons
 Location: Approaching SR 20
 Frequency: Intermittent
 Direction: Westbound
 Platoon Population: 30 to 40 vpl
 Number of Lanes: 1

Arterial LOS Legend

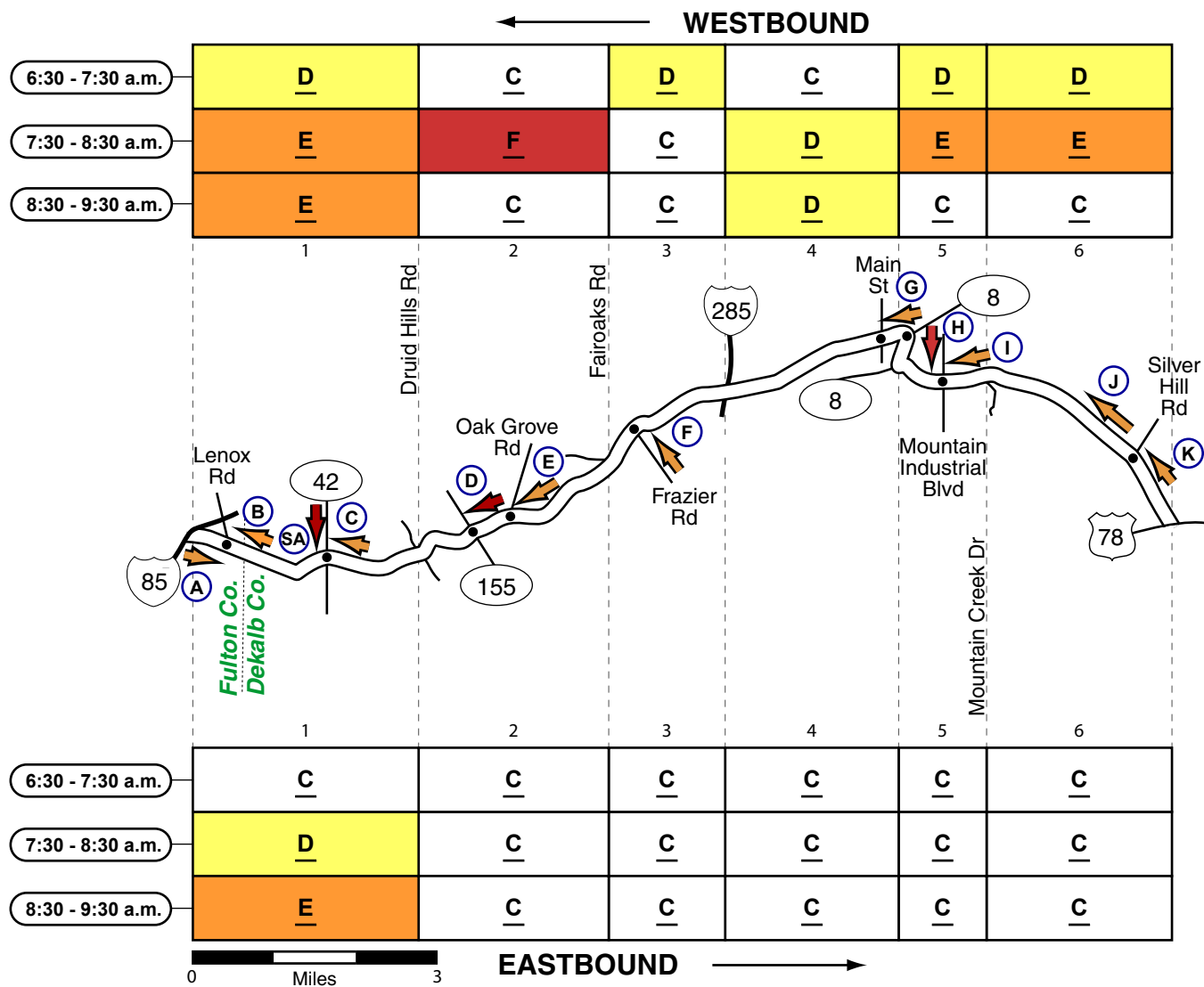
| A | B | C | D | E | F |
|------------|-------|----------|-------|-----------|--------|
| Very Light | Light | Moderate | Heavy | Congested | Severe |

SR 212 (Newton County) - Evening



Spring 2010

SR 236 (Fulton & DeKalb Counties) - Morning



Arterial LOS Legend

| | | | | | |
|------------|----------|----------|----------|-----------|----------|
| <u>A</u> | <u>B</u> | <u>C</u> | <u>D</u> | <u>E</u> | <u>F</u> |
| Very Light | Light | Moderate | Heavy | Congested | Severe |

SR 236 (Fulton & Dekalb Counties) - Morning**A**

Congestion Type: Mainline Signal Queue
Location: Lenox Rd/Cheshire Bridge Rd
Frequency: Intermittent
Direction: Eastbound
Queue Population: 35 to 45 vpl
Number of Lanes: 1

B

Congestion Type: Mainline Signal Queue
Location: Lenox Rd/Cheshire Bridge Rd
Frequency: Intermittent
Direction: Westbound
Queue Population: 25 to 45 vpl
Number of Lanes: 1

C

Congestion Type: Mainline Signal Queue
Location: SR 42
Frequency: Intermittent
Direction: Westbound
Queue Population: 20 to 25 vpl
Number of Lanes: 1

D

Congestion Type: Mainline Signal Queue
Location: SR 155
Frequency: Peak Hour
Direction: Westbound
Population: 45 to 55 vpl
Number of Lanes: 1

E

Congestion Type: Mainline Signal Queue
Location: Oak Grove Rd
Frequency: Intermittent
Direction: Westbound
Queue Population: 20 to 25 vpl
Number of Lanes: 1

F

Congestion Type: Cross Road Signal Queue
Location: Frazier Rd
Frequency: Intermittent
Direction: Northbound
Queue Population: 20 to 25 vpl
Number of Lanes: 1

G

Congestion Type: Mainline Signal Queue
Location: Main St
Frequency: Intermittent
Direction: Westbound
Queue Population: 20 to 30 vpl
Number of Lanes: 2

H

Congestion Type: Cross Road Signal Queue
Location: Mountain Industrial Blvd
Frequency: Peak Hour
Direction: Southbound
Queue Population: 20 to 50 vpl
Number of Lanes: 2

I

Congestion Type: Mainline Signal Queue
Location: Mountain Industrial Blvd
Frequency: Intermittent
Direction: Westbound
Queue Population: 20 to 30 vpl
Number of Lanes: 2

J

Congestion Type: Platoons
Location: Between US 78 & Mountain Creek Dr
Frequency: Intermittent
Direction: Westbound
Platoon Population: 25 to 35 vpl
Number of Lanes: 1

K

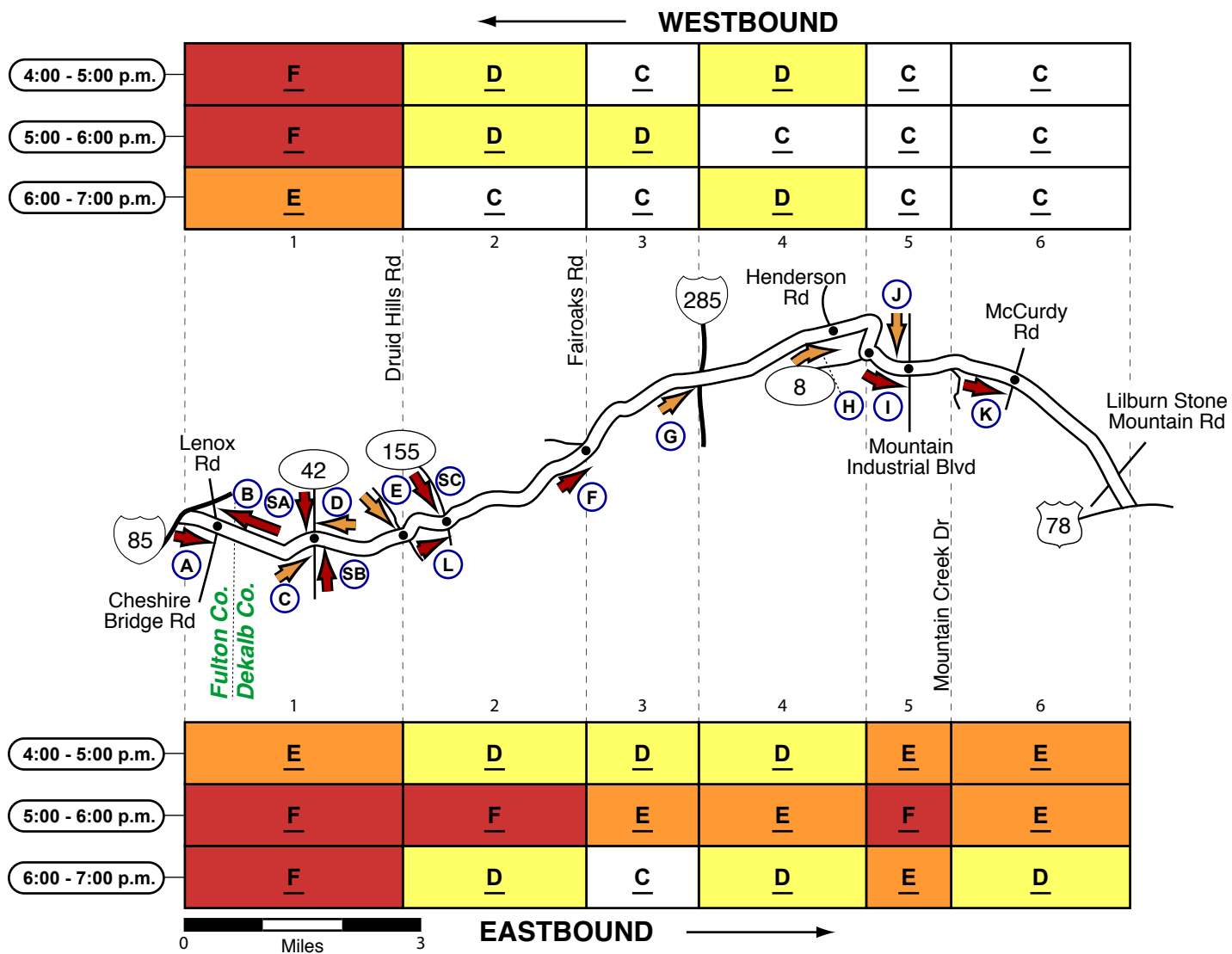
Congestion Type: Mainline Signal Queue
Location: Silver Hill Rd
Frequency: Intermittent
Direction: Westbound
Queue Population: 20 to 30 vpl
Number of Lanes: 1

SA

Congestion Type: Surveyed Cross Road Signal Queue
Location: SR 42
Frequency: Most Observations
Direction: Southbound
Queue Population: 20 to 60 vpl
Number of Lanes: 1

Spring 2010

SR 236 (Fulton & DeKalb Counties) - Evening



Arterial LOS Legend

| | | | | | |
|------------|----------|----------|----------|-----------|----------|
| <u>A</u> | <u>B</u> | <u>C</u> | <u>D</u> | <u>E</u> | <u>F</u> |
| Very Light | Light | Moderate | Heavy | Congested | Severe |

SR 236 (Fulton & Dekalb Counties) - Evening

A

Congestion Type: Mainline Signal Queue
Location: Lenox Rd/Cheshire Bridge Rd
Frequency: Most Observations
Direction: Eastbound
Queue Population: 40 to 70 vpl
Number of Lanes: 1

B

Congestion Type: Mainline Signal Queue
Location: Lenox Rd/Cheshire Bridge Rd
Frequency: Most Observations
Direction: Westbound
Queue Population: 35 to 75 vpl
Number of Lanes: 1

C

Congestion Type: Mainline Signal Queue
Location: SR 42
Frequency: Intermittent
Direction: Eastbound
Queue Population: 20 to 30 vpl
Number of Lanes: 1
Note: During one observation, the queue contained approximately 50 vehicles.

D

Congestion Type: Mainline Signal Queue
Location: SR 42
Frequency: Intermittent
Direction: Westbound
Queue Population: 20 to 25 vpl
Number of Lanes: 1

E

Congestion Type: Cross Road Signal Queue
Location: Druid Hills Rd
Frequency: On some days but not others
Direction: Southbound
Queue Population: 20 to 60 vpl
Number of Lanes: 2

F

Congestion Type: Mainline Signal Queue
Location: Fair Oaks Rd
Frequency: Peak Hour
Direction: Eastbound
Population: 40 to 80 vpl
Number of Lanes: 1

G

Congestion Type: Platoons
Location: Approaching I-285
Frequency: Intermittent
Direction: Eastbound
Platoon Population: 25 to 35 vpl
Number of Lanes: 3

H

Congestion Type: Mainline Signal Queue
Location: Henderson Rd
Frequency: Intermittent
Direction: Eastbound
Queue Population: 25 to 35 vpl
Number of Lanes: 2

I

Congestion Type: Mainline Signal Queue
Location: Mountain Industrial Blvd
Frequency: Peak Hour
Direction: Eastbound
Queue Population: 25 to 60 vpl
Number of Lanes: 2

J

Congestion Type: Cross Road Signal Queue
Location: Mountain Industrial Blvd
Frequency: One time only
Direction: Southbound
Queue Population: 20 to 25 vpl
Number of Lanes: 2

K

Congestion Type: Mainline Signal Queue/
Platoons
Location: McCurdy Rd
Frequency: Intermittent
Direction: Eastbound
Queue Population: 30 to 100 vpl
Number of Lanes: 1
Note: It is likely that left-turning vehicles along this corridor contributed to the congestion.

L

Congestion Type: Mainline Signal Queue
Location: SR 155
Frequency: Peak Hour
Direction: Eastbound
Queue Population: 20 to 40 vpl
Number of Lanes: 1

SA

Congestion Type: Surveyed Cross Road
Signal Queue
Location: SR 42
Frequency: Most Observations
Direction: Southbound
Queue Population: 20 to 70 vpl
Number of Lanes: 1

SB

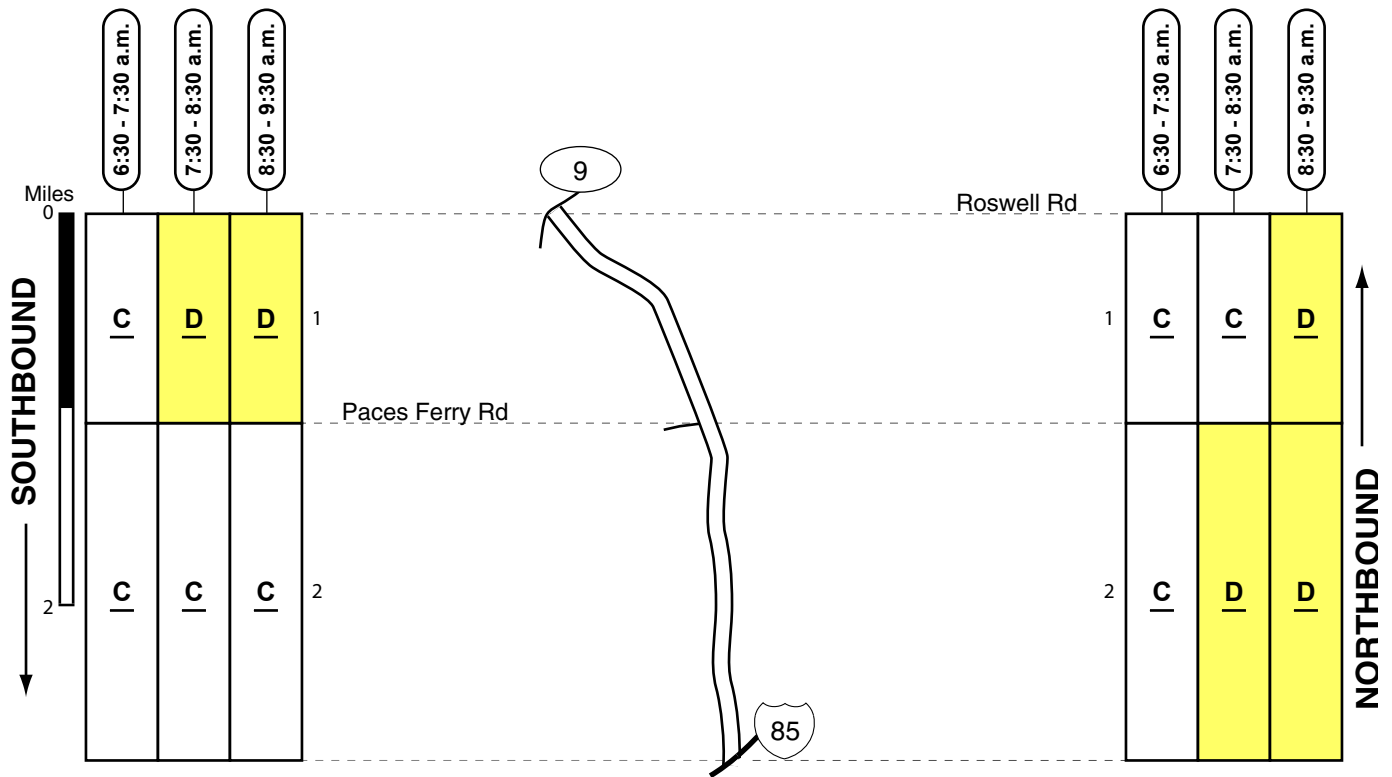
Congestion Type: Surveyed Cross Road
Signal Queue
Location: SR 42
Frequency: Most Observations
Direction: Northbound
Queue Population: 20 to 60 vpl
Number of Lanes: 1

SC

Congestion Type: Surveyed Cross Road
Signal Queue
Location: SR 155
Frequency: Peak Hour
Direction: Southbound
Queue Population: 20 to 40 vpl
Number of Lanes: 2

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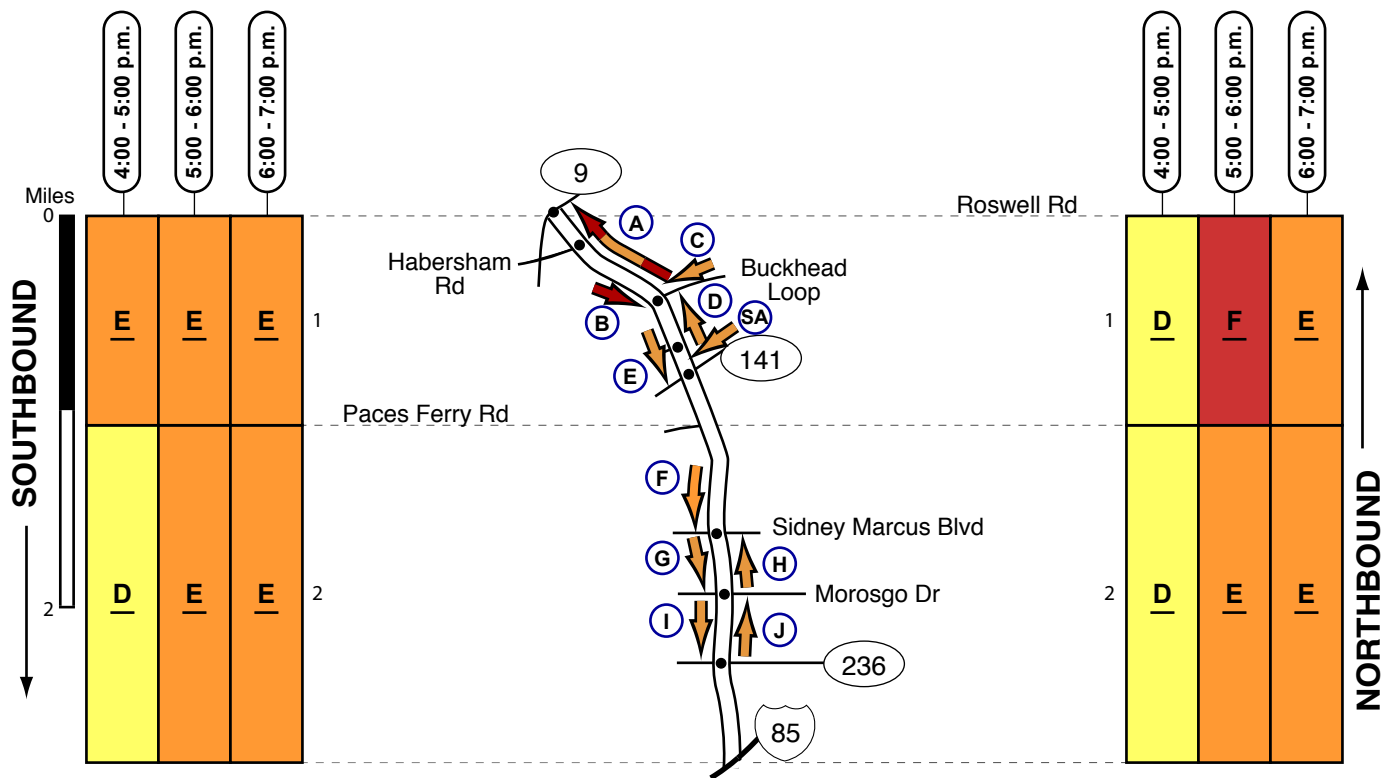
Spring 2010 SR 237 (Fulton County) - Morning



Arterial LOS Legend

| A | B | C | D | E | F |
|------------|-------|----------|-------|-----------|--------|
| Very Light | Light | Moderate | Heavy | Congested | Severe |

SR 237 (Fulton County) - Evening



SR 237 (Fulton County) - Evening

A

Congestion Type: Mainline Signal Queue

Location: SR 9 & Habersham Rd

Frequency: Most Observations

Direction: Northbound

Queue Population: 20 to 40 vpl

Number of Lanes: 2

Note: Northbound congestion was typically found at the three signals located between Buckhead Loop and SR 9.

B

Congestion Type: Left-Turn Queue

Location: Buckhead Loop

Frequency: Peak Hour

Direction: Southbound

Queue Population: 20 to 30 vpl

Number of Lanes: 2

Note: When congested, vehicles were queued in the left turn bay at Buckhead Loop; during some observations, congestion in the left turn bay extended back into the left lane on SR 237..

C

Congestion Type: Cross Road Signal Queue

Location: Buckhead Loop

Frequency: Intermittent

Direction: Westbound

Queue Population: 20 to 30 vpl

Number of Lanes: 2

Note: When congested, vehicles were queued in the two dedicated left-turn lanes at the signal (to southbound SR 237).

D

Congestion Type: Left-Turn Queue

Location: Buckhead Loop

Frequency: Intermittent

Direction: Northbound

Queue Population: 20 to 30 vpl

Number of Lanes: 2

E

Congestion Type: Mainline Signal Queue

Location: SR 141

Frequency: Intermittent

Direction: Southbound

Queue Population: 20 to 30 vpl

Number of Lanes: 2

F

Congestion Type: Mainline Signal Queue

Location: Sidney Marcus Blvd

Frequency: Intermittent

Direction: Southbound

Queue Population: 20 to 40 vpl

Number of Lanes: 2

G

Congestion Type: Mainline Signal Queue

Location: Morosgo Dr

Frequency: Intermittent

Direction: Southbound

Queue Population: 20 to 30 vpl

Number of Lanes: 2

H

Congestion Type: Mainline Signal Queue

Location: Sidney Marcus Blvd

Frequency: Intermittent

Direction: Northbound

Queue Population: 20 to 30 vpl

Number of Lanes: 2

I

Congestion Type: Mainline Signal Queue

Location: SR 236

Frequency: Intermittent

Direction: Southbound

Queue Population: 20 to 30 vpl

Number of Lanes: 2

J

Congestion Type: Mainline Signal Queue

Location: Morosgo Dr

Frequency: Intermittent

Direction: Northbound

Queue Population: 20 to 30 vpl

Number of Lanes: 2

SA

Congestion Type: Surveyed Cross Road Signal Queue

Location: SR 141

Frequency: Intermittent

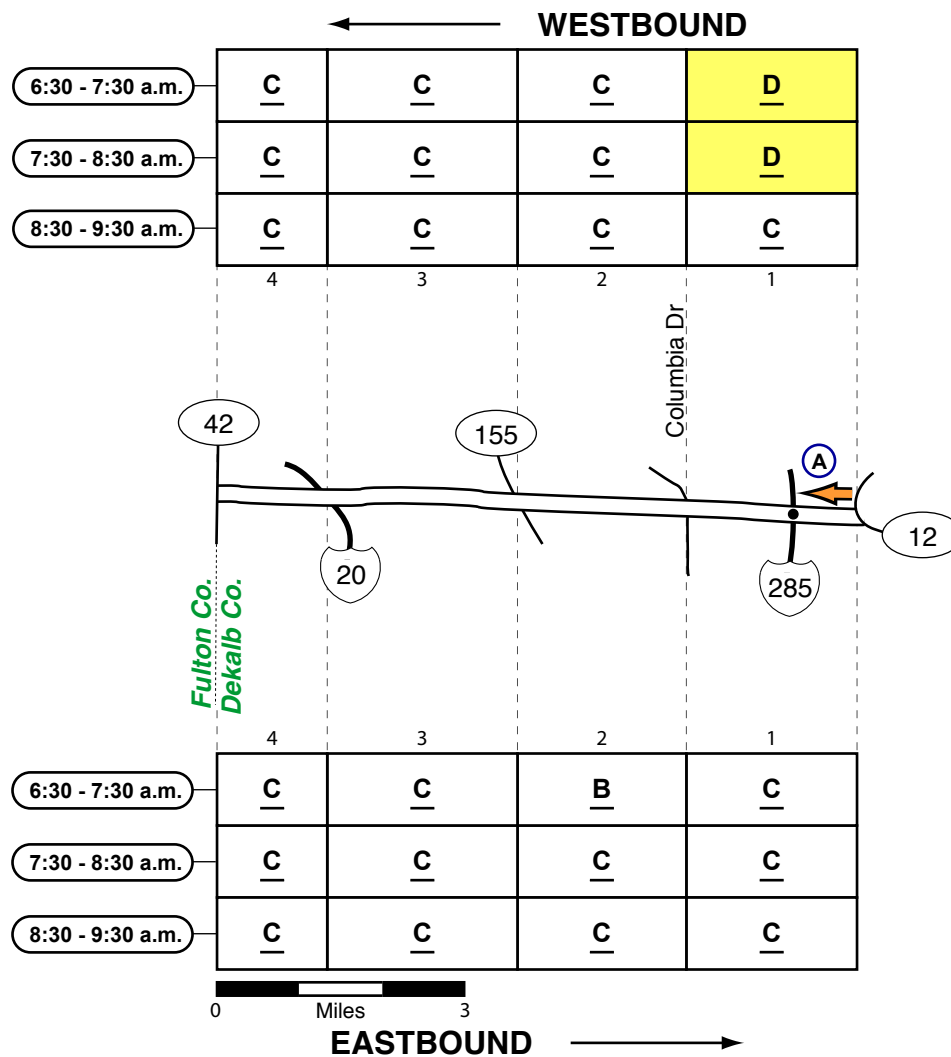
Direction: Southbound

Queue Population: 20 to 30 vpl

Number of Lanes: 3

Spring 2010

SR 260 (DeKalb County) - Morning

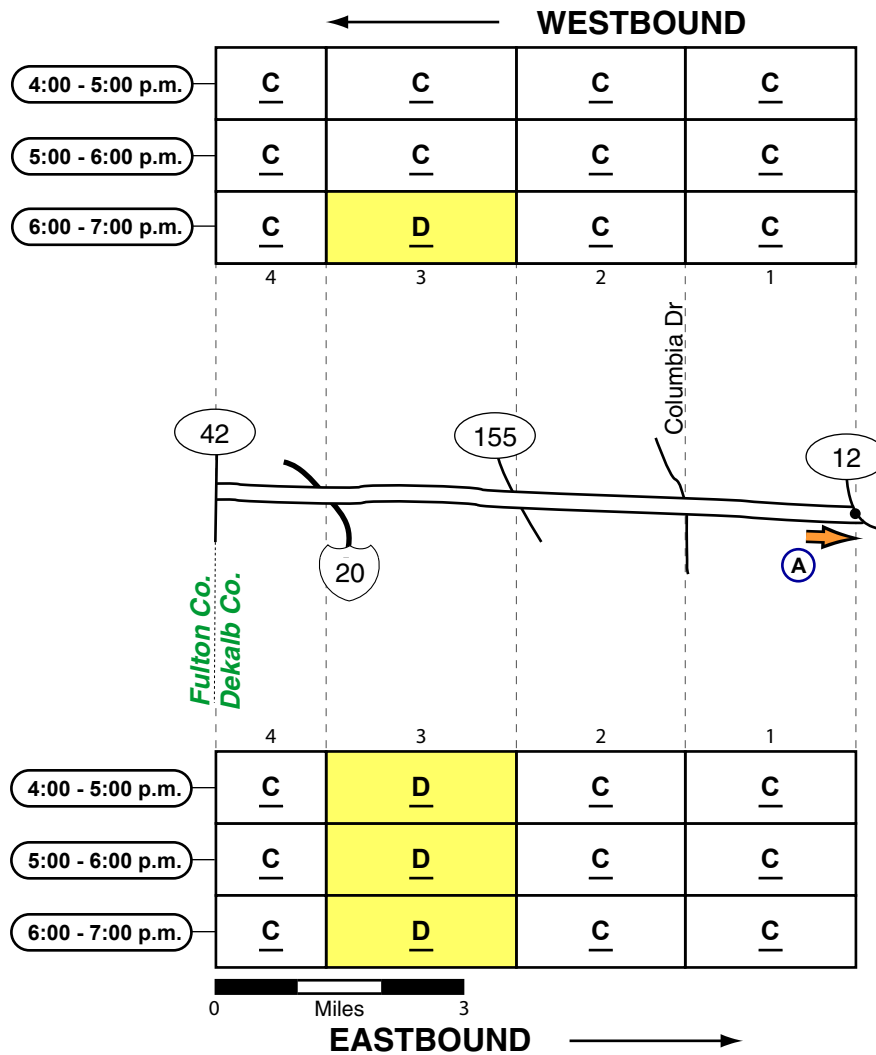


A
 Congestion Type: Mainline Signal Queue
 Location: I-285
 Frequency: Intermittent
 Direction: Westbound
 Queue Population: 20 to 30 vpl
 Number of Lanes: 2

Arterial LOS Legend

| | | | | | |
|------------|----------|----------|----------|-----------|----------|
| <u>A</u> | <u>B</u> | <u>C</u> | <u>D</u> | <u>E</u> | <u>F</u> |
| Very Light | Light | Moderate | Heavy | Congested | Severe |

SR 260 (DeKalb County) - Evening



A

Congestion Type: Mainline Queue

Location: SR 12

Frequency: Intermittent

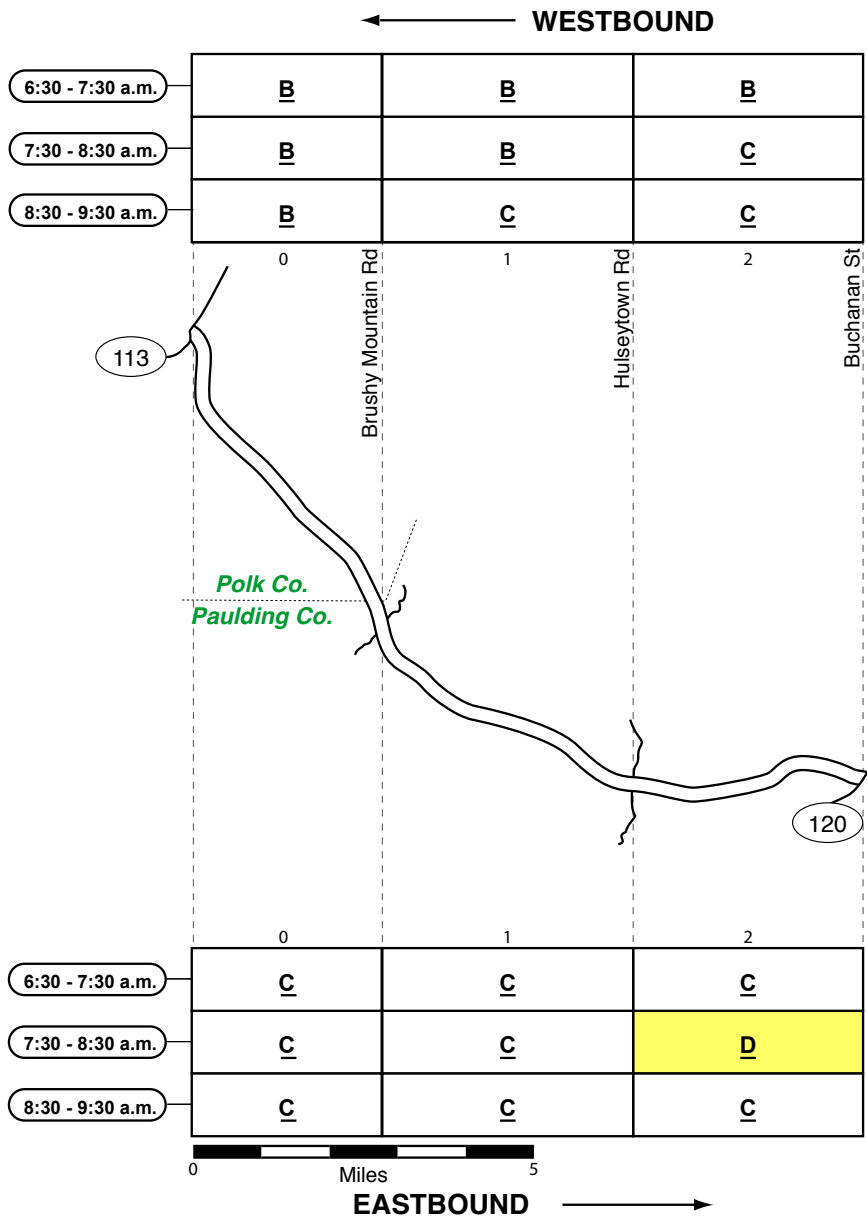
Direction: Eastbound

Queue Population: 20 to 30 vpl

Number of Lanes: 1

Note: When congested, vehicles were queued in the right lane on SR 260 approaching SR 12 (no signal for right-turning vehicles).

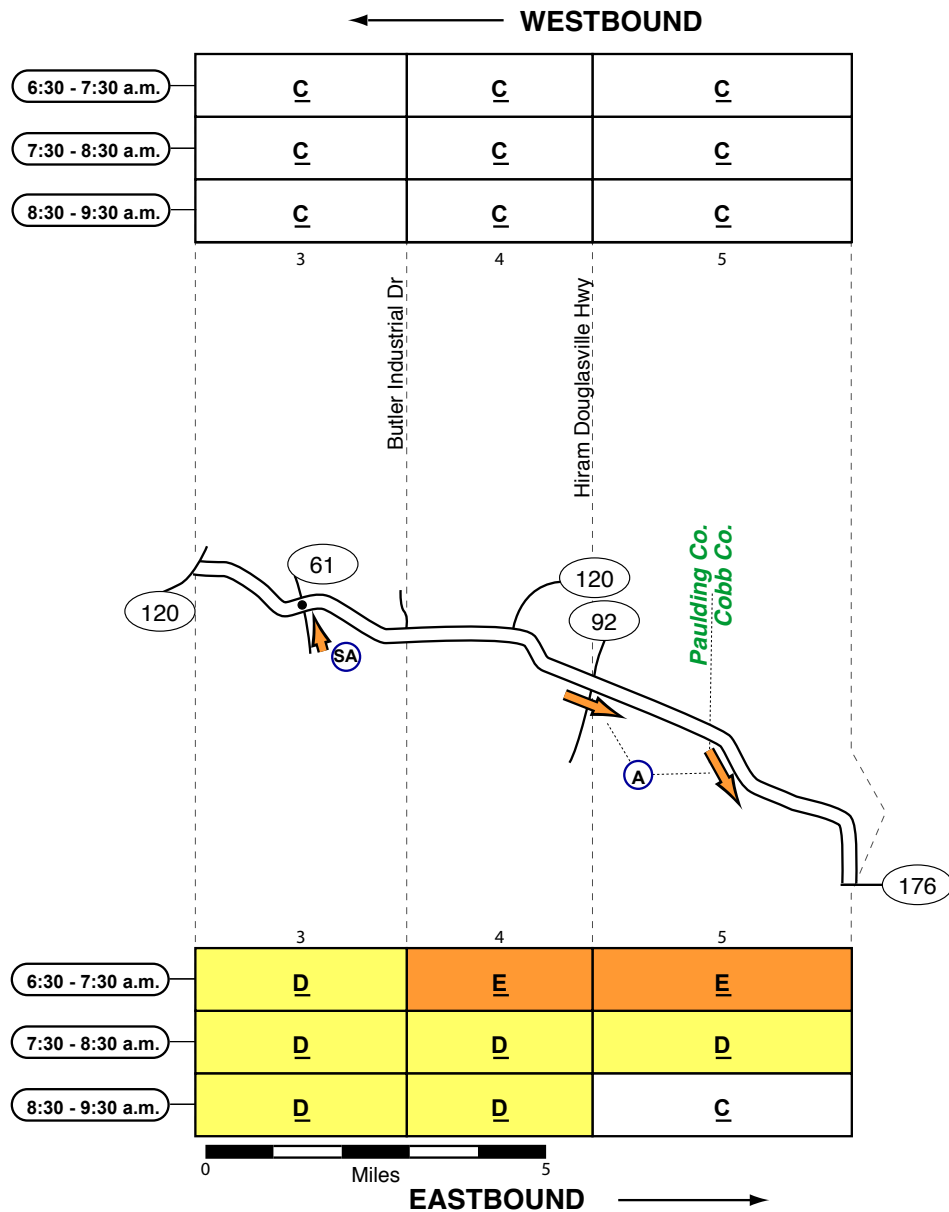
US 278 (Polk & Paulding Counties) - Morning



Arterial LOS Legend

| A | B | C | D | E | F |
|------------|-------|----------|-------|-----------|--------|
| Very Light | Light | Moderate | Heavy | Congested | Severe |

US 278 (Paulding & Cobb Counties) - Morning



A

Congestion Type: Platoons
 Location: Between SR 92 & SR 176
 Frequency: Intermittent
 Direction: Eastbound
 Queue Population: 25 to 35 vpl
 Number of Lanes: 2

SA

Congestion Type: Surveyed Cross Road Signal Queue
 Location: SR 61
 Frequency: Intermittent
 Direction: Northbound
 Queue Population: 20 to 35 vpl
 Number of Lanes: 1

Arterial LOS Legend

| A | B | C | D | E | F |
|------------|-------|----------|-------|-----------|--------|
| Very Light | Light | Moderate | Heavy | Congested | Severe |

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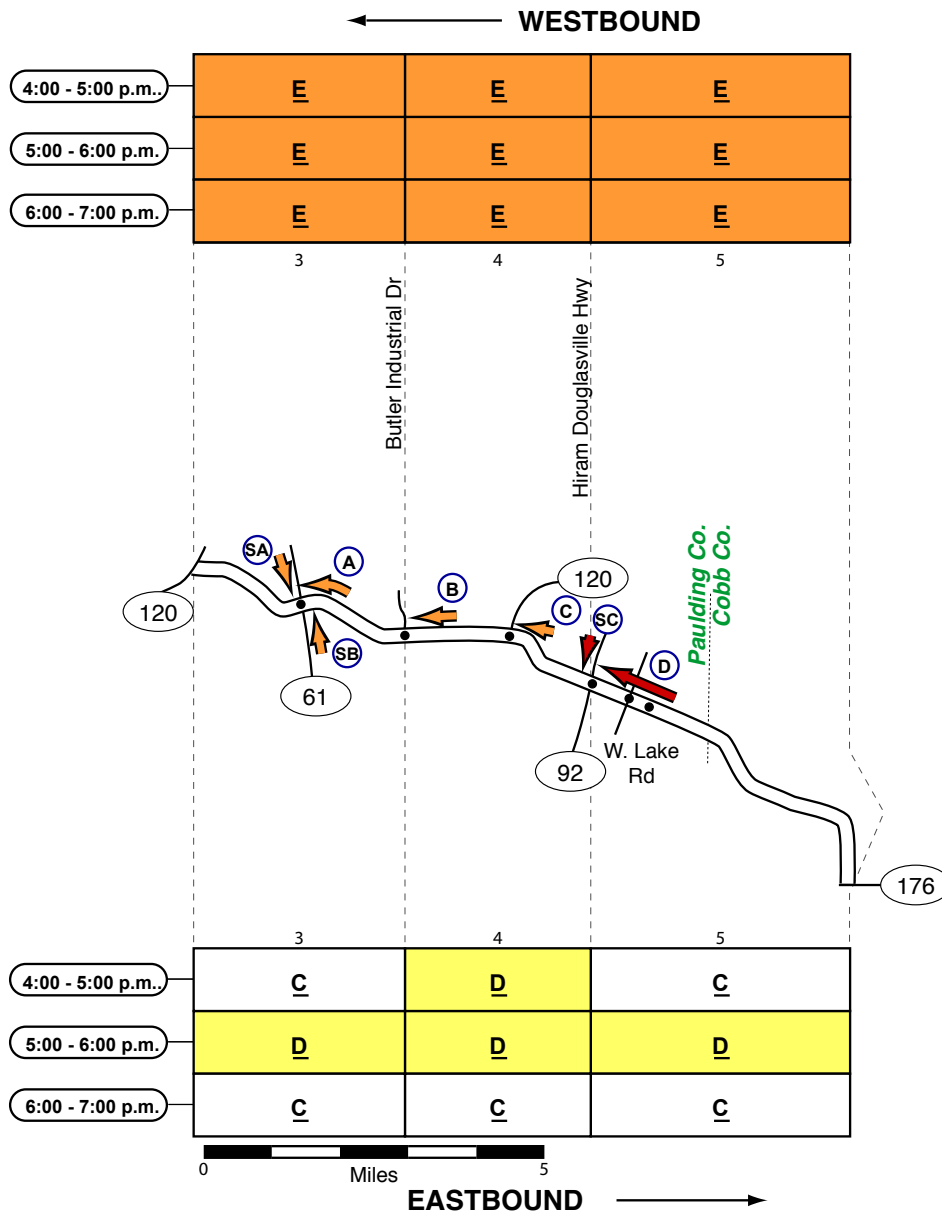
US 278 (Polk & Paulding Counties) - Evening



Arterial LOS Legend

| | | | | | |
|------------|----------|----------|----------|-----------|----------|
| <u>A</u> | <u>B</u> | <u>C</u> | <u>D</u> | <u>E</u> | <u>F</u> |
| Very Light | Light | Moderate | Heavy | Congested | Severe |

US 278 (Paulding & Cobb Counties) - Evening



US 278 (Paulding & Cobb Counties) - Evening

A

Congestion Type: Mainline Signal Queue

Location: SR 61 (Villa Rica Hwy)

Frequency: Intermittent

Direction: Westbound

Queue Population: 20 to 30 vpl

Number of Lanes: 2

B

Congestion Type: Mainline Signal Queue/Platoons

Location: Butler Industrial Dr

Frequency: Intermittent

Direction: Westbound

Queue Population: 20 to 30 vpl

Number of Lanes: 2

C

Congestion Type: Mainline Signal Queue

Location: SR 120 (Marietta Hwy)

Frequency: Intermittent

Direction: Westbound

Queue Population: 20 to 30 vpl

Number of Lanes: 2

D

Congestion Type: Mainline Signal Queue

Location: SR 92

Frequency: Peak Hour

Direction: Westbound

Queue Population: 20 to 50 vpl

Number of Lanes: 2

Note: During some observations, congestion approaching the signal at SR 92 extended back through several upstream signals.

SA

Congestion Type: Surveyed Cross Road Signal Queue

Location: SR 61

Frequency: Intermittent

Direction: Southbound

Queue Population: 20 to 25 vpl

Number of Lanes: 1

SB

Congestion Type: Surveyed Cross Road Signal Queue

Location: SR 61

Frequency: Intermittent

Direction: Northbound

Queue Population: 20 to 35 vpl

Number of Lanes: 1

SC

Congestion Type: Surveyed Cross Road Signal Queue

Location: SR 92

Frequency: Peak Hour

Direction: Southbound

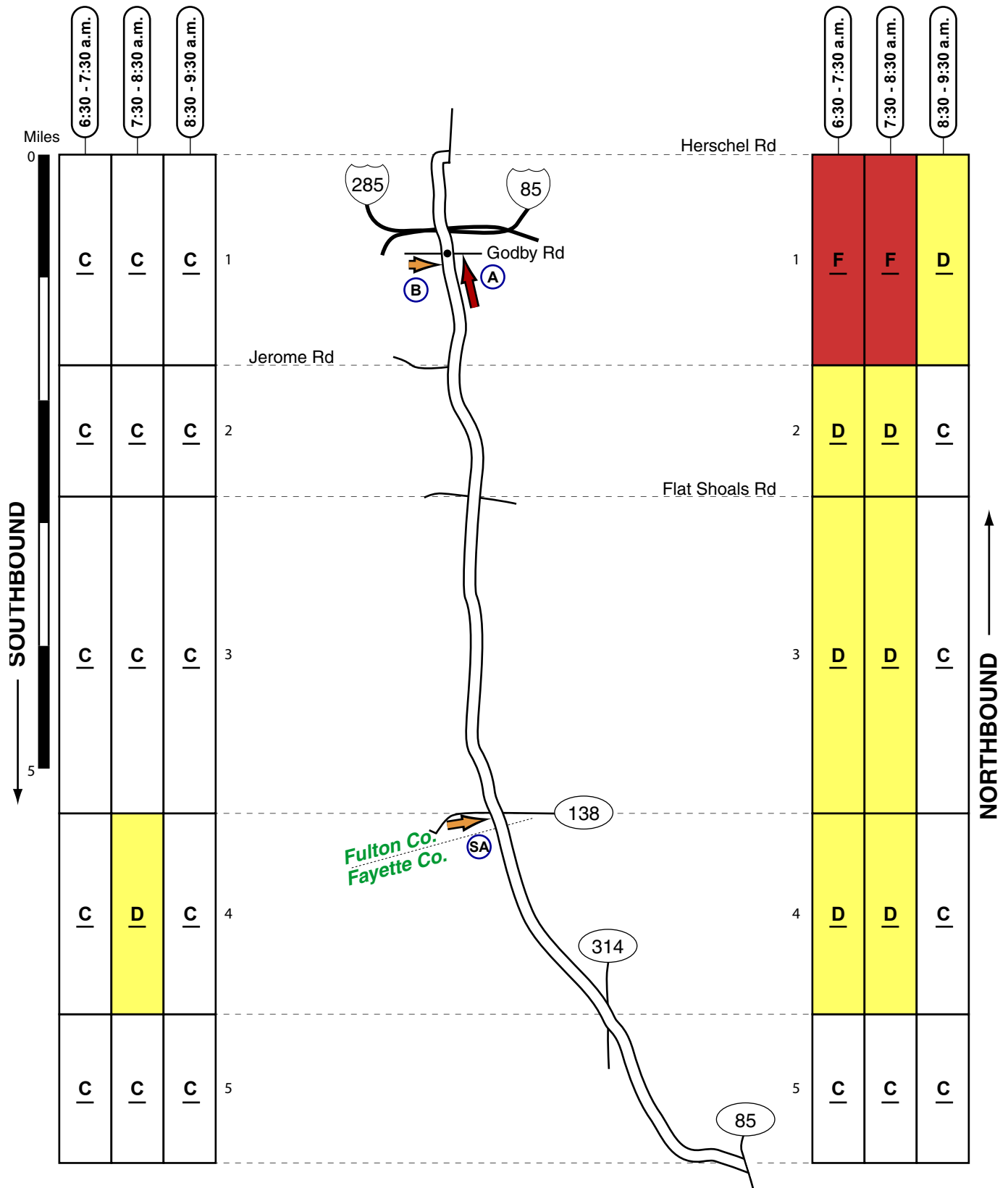
Queue Population: 20 to 50 vpl

Number of Lanes: 1

Arterial LOS Legend

| <u>A</u> | <u>B</u> | <u>C</u> | <u>D</u> | <u>E</u> | <u>F</u> |
|------------|----------|----------|----------|-----------|----------|
| Very Light | Light | Moderate | Heavy | Congested | Severe |

SR 279 (Fulton & Fayette Counties) - Morning



SR 279 (Fulton & Fayette Counties) - Morning

A

Congestion Type: Mainline Signal Queue

Location: Godby Rd

Frequency: Most Observations

Direction: Northbound

Queue Population: 20 to 80 vpl

Number of Lanes: 2

B

Congestion Type: Cross Road Signal Queue

Location: Godby Rd

Frequency: Intermittent

Direction: Eastbound

Queue Population: 20 to 25 vpl

Number of Lanes: 1

Note: When congested, vehicles at the head of the queue were found in the left-turn bay at the signal.

SA

Congestion Type: Surveyed Cross Road Signal Queue

Location: SR 138

Frequency: Intermittent

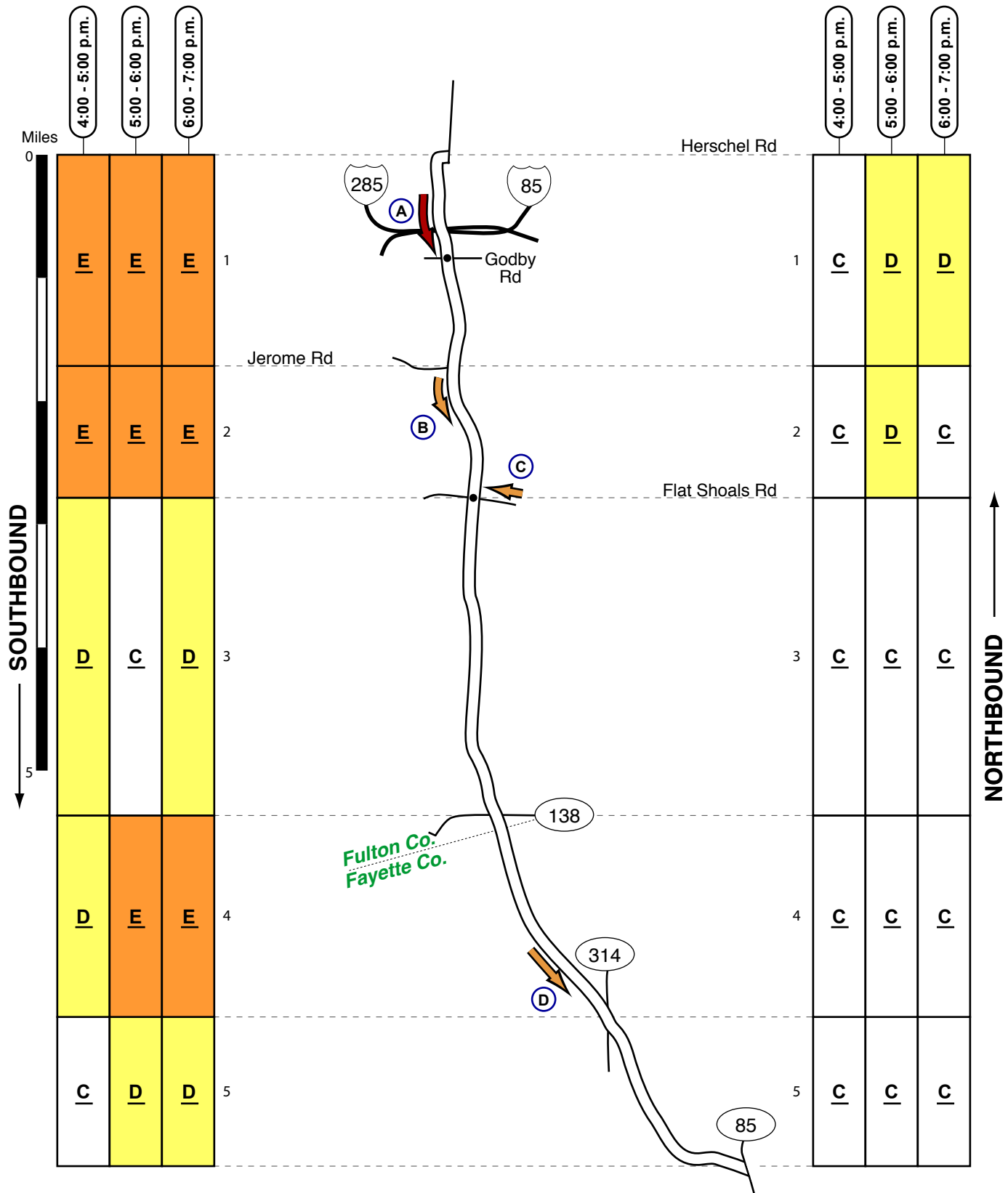
Direction: Eastbound

Queue Population: 20 to 40 vpl

Number of Lanes: 2

Note: During some observations, congestion was found in the left- turn bay at the signal.

SR 279 (Fulton & Fayette Counties) - Evening



SR 279 (Fulton & Fayette Counties) - Evening

A

Congestion Type: Mainline Signal Queue

Location: Godby Rd

Frequency: Most Observations

Direction: Southbound

Queue Population: 20 to 40 vpl

Number of Lanes: 2

B

Congestion Type: Platoons

Location: Between Jerome Rd & Flat Shoals Rd

Frequency: Intermittent

Direction: Southbound

Platoon Population: 25 to 30 vpl

Number of Lanes: 2

C

Congestion Type: Cross Road Signal Queue

Location: Flat Shoals Rd

Frequency: Intermittent

Direction: Westbound

Queue Population: 20 to 30 vpl

Number of Lanes: 2

D

Congestion Type: Platoons

Location: Between SR 138 & SR 314

Frequency: Intermittent

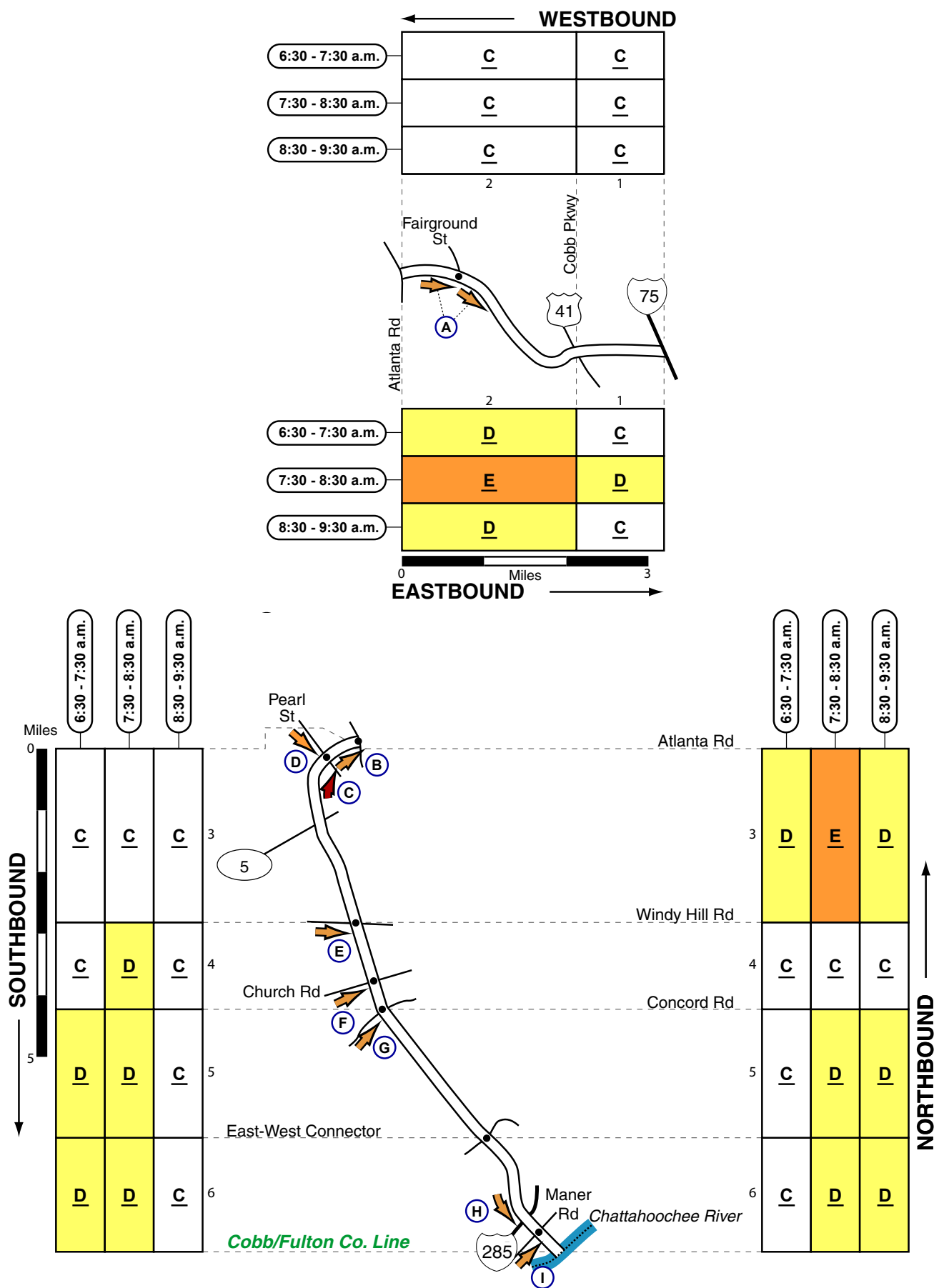
Direction: Southbound

Platoon Population: 25 to 30 vpl

Number of Lanes: 1

Spring 2010

SR 280 (Cobb County) - Morning



Arterial LOS Legend

| A | B | C | D | E | F |
|------------|-------|----------|-------|-----------|--------|
| Very Light | Light | Moderate | Heavy | Congested | Severe |

SR 280 (Cobb County) - Morning**A**

Congestion Type: Mainline Signal Queue/Platoons
Location: Vicinity of Fairground St
Frequency: Intermittent
Direction: Eastbound
Queue Population: 25 to 35 vpl
Number of Lanes: 2

B

Congestion Type: Mainline Signal Queue
Location: Atlanta Rd
Frequency: Intermittent
Direction: Northbound
Queue Population: 20 to 30 vpl
Number of Lanes: 2

C

Congestion Type: Mainline Signal Queue
Location: Pearl St
Frequency: Peak Hour
Direction: Northbound
Queue Population: 20 to 40 vpl
Number of Lanes: 2

D

Congestion Type: Cross Road Signal Queue
Location: Pearl St
Frequency: Intermittent
Direction: Southbound
Queue Population: 20 to 25 vpl
Number of Lanes: 1
Note: When congested, the head of the queue was found in the left turn lane.

E

Congestion Type: Cross Road Signal Queue
Location: Windy Hill Rd
Frequency: Intermittent
Direction: Eastbound
Queue Population: 20 to 40 vpl
Number of Lanes: 2

F

Congestion Type: Cross Road Signal Queue
Location: Church Rd
Frequency: Intermittent
Direction: Eastbound
Queue Population: 20 to 30 vpl
Number of Lanes: 1

G

Congestion Type: Cross Road Signal Queue
Location: Concord Rd
Frequency: Intermittent
Direction: Eastbound
Queue Population: 20 to 30 vpl
Number of Lanes: 2

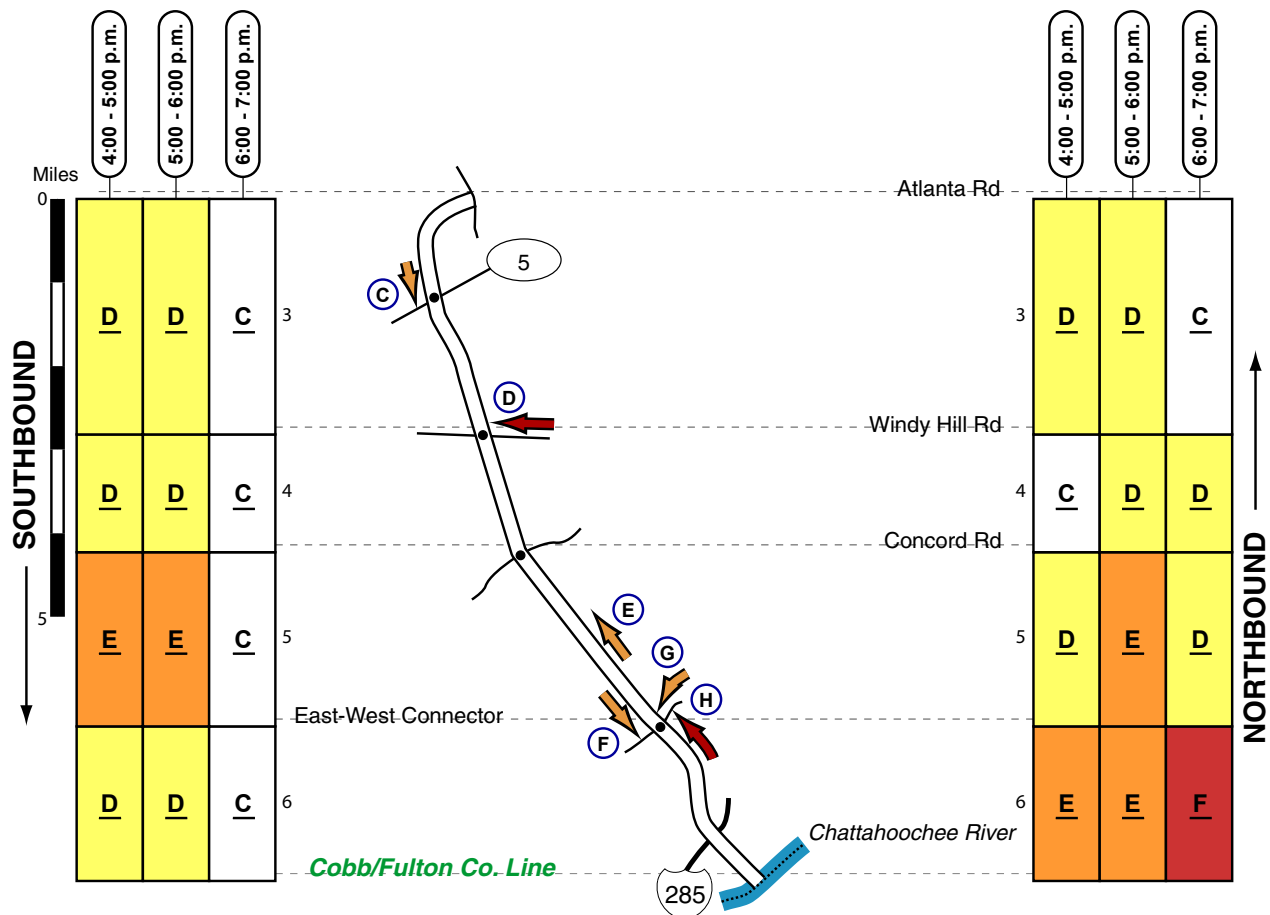
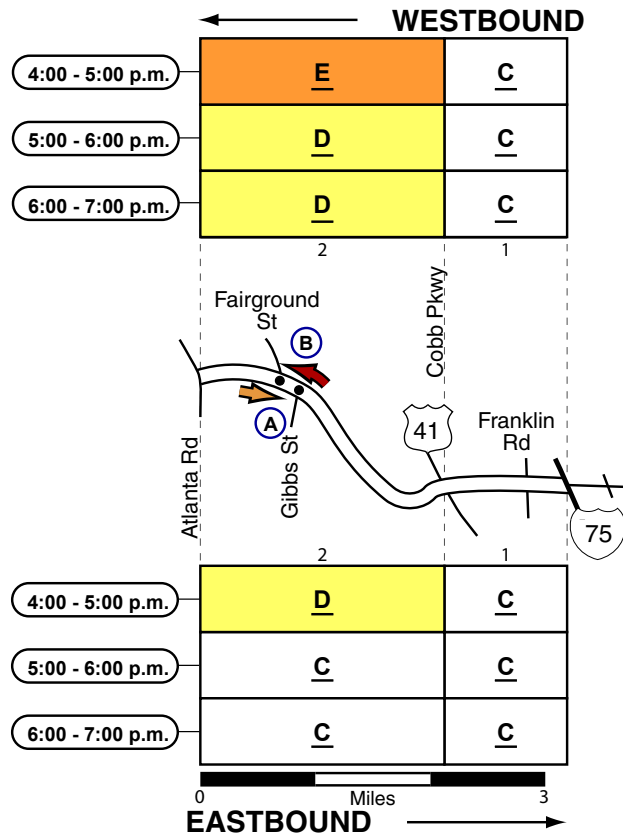
H

Congestion Type: Left-Turn Queue
Location: I-285
Frequency: Intermittent
Direction: Southbound
Queue Population: 20 to 30 vpl
Number of Lanes: 2
Note: When congested, vehicles were queued in the two left-turn lanes at the signal waiting to turn onto the I-285 northbound ramp.

I

Congestion Type: Cross Road Signal Queue
Location: Maner Rd
Frequency: Intermittent
Direction: Eastbound
Queue Population: 20 to 40 vpl
Number of Lanes: 1

Spring 2010 SR 280 (Cobb County) - Evening



Arterial LOS Legend

| A | B | C | D | E | F |
|------------|-------|----------|-------|-----------|--------|
| Very Light | Light | Moderate | Heavy | Congested | Severe |

Spring 2010
SR 280 (Cobb County) - Evening

PERFORMANCE RATINGS

361

A

Congestion Type: Left-Turn Queue
Location: Fairground St
Frequency: Intermittent
Direction: Eastbound
Queue Population: 20 to 30 vpl
Number of Lanes: 1

B

Congestion Type: Mainline Signal Queue
Location: Fairground St
Frequency: Peak Hour
Direction: Westbound
Queue Population: 20 to 40 vpl
Number of Lanes: 2

C

Congestion Type: Right-Turn Queue
Location: SR 5
Frequency: Intermittent
Direction: Southbound
Queue Population: 20 to 30 vpl
Number of Lanes: 1

D

Congestion Type: Cross Road Signal Queue
Location: Windy Hill Rd
Frequency: Most Observations
Direction: Westbound
Queue Population: 20 to 40 vpl
Number of Lanes: 2

E

Congestion Type: Platoons
Location: Between East-West Connector and Concord Rd
Frequency: Intermittent
Direction: Northbound
Platoon Population: 25 to 40 vpl
Number of Lanes: 2

F

Congestion Type: Mainline Signal Queue
Location: East-West Connector
Frequency: Intermittent
Direction: Southbound
Queue Population: 20 to 30 vpl
Number of Lanes: 2

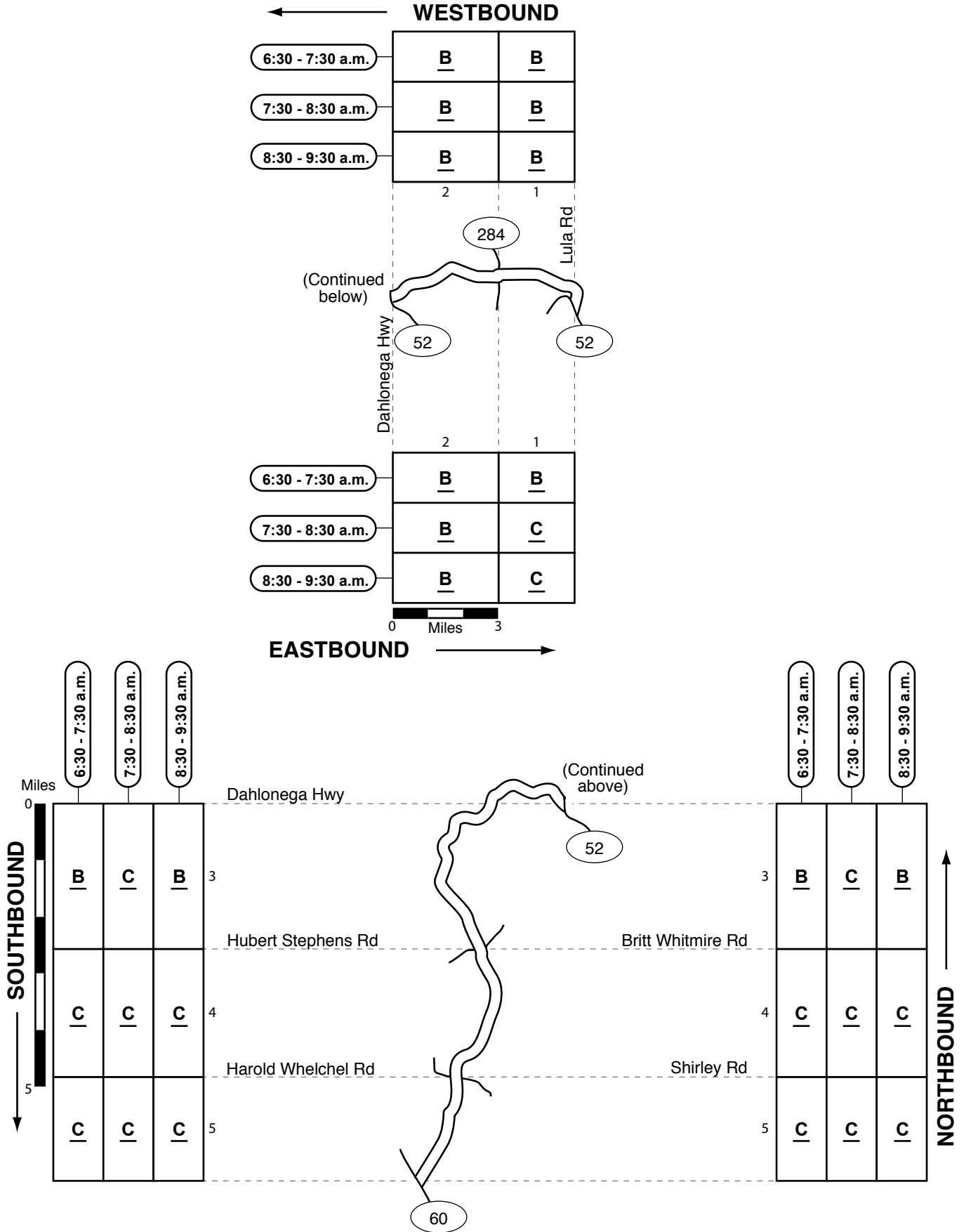
G

Congestion Type: Cross Road Signal Queue
Location: East-West Connector
Frequency: Intermittent
Direction: Westbound
Queue Population: 20 to 25 vpl
Number of Lanes: 2

H

Congestion Type: Mainline Signal Queue
Location: East-West Connector
Frequency: Most observations
Direction: Northbound
Queue Population: 25 to 60 vpl
Number of Lanes: 2
Note: During some observations, congestion extended back through the upstream signal at Wright Dr.

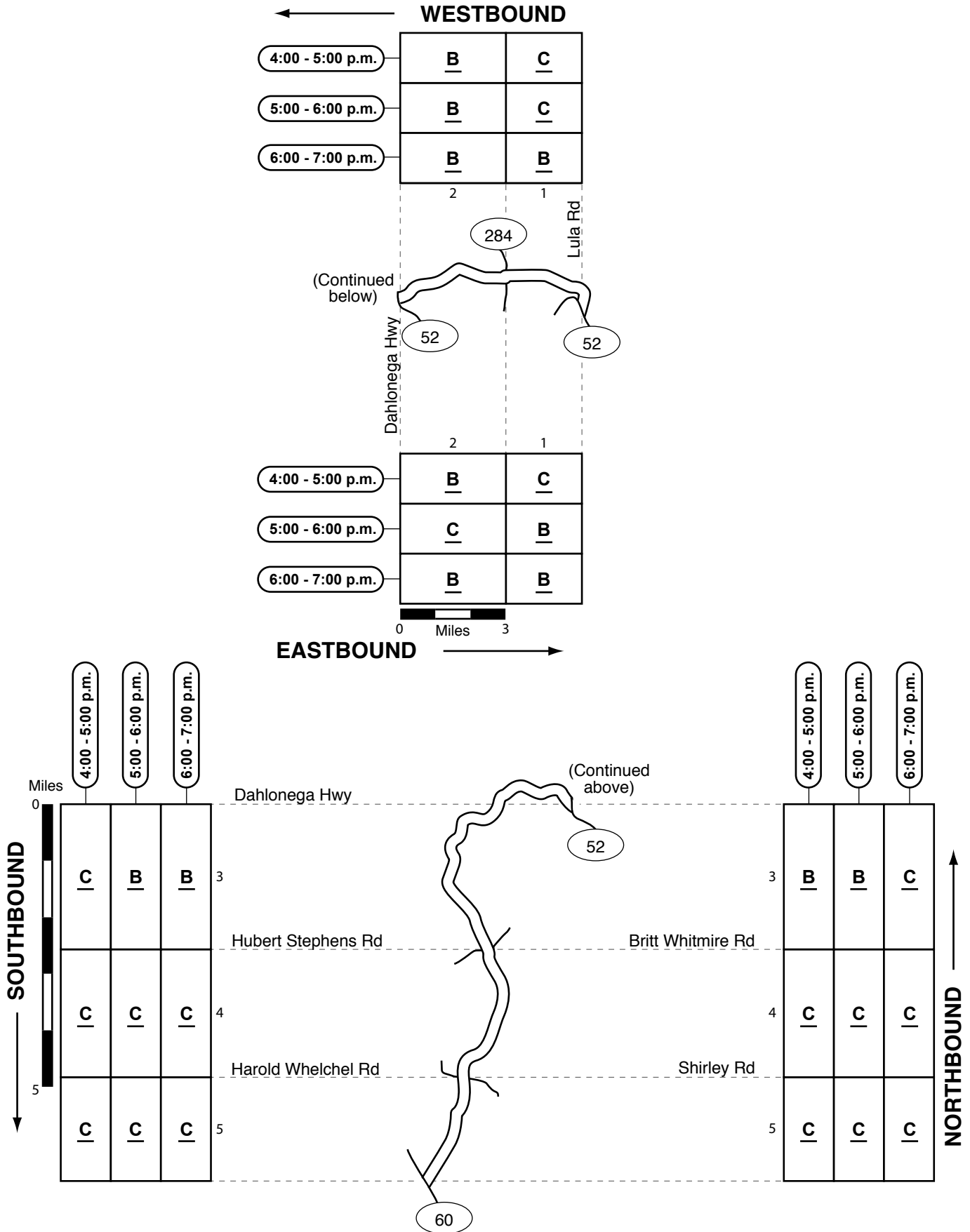
SR 283 (Hall County) - Morning



Arterial LOS Legend

| A | B | C | D | E | F |
|------------|-------|----------|-------|-----------|--------|
| Very Light | Light | Moderate | Heavy | Congested | Severe |

SR 283 (Hall County) - Evening

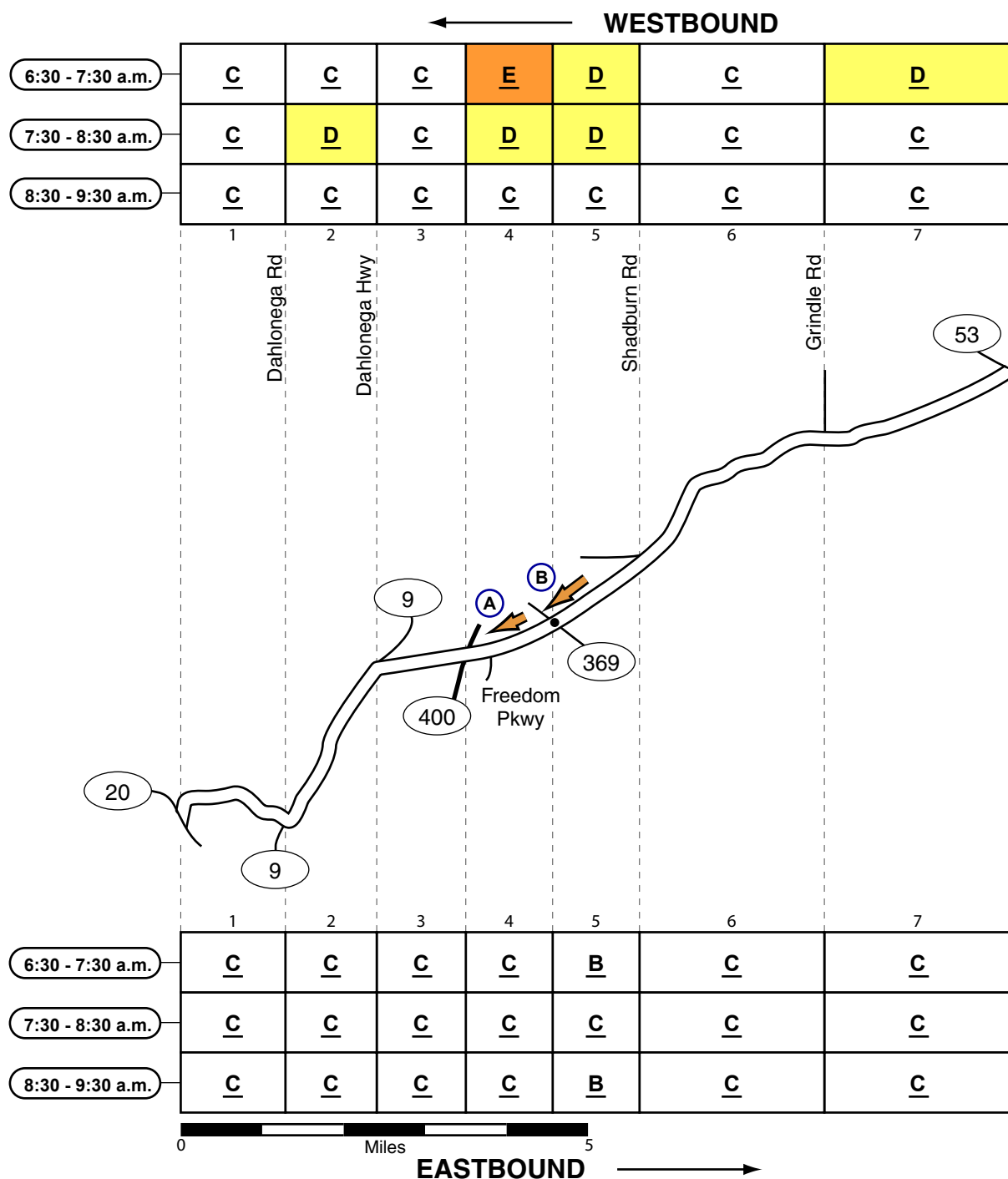


Arterial LOS Legend

| A | B | C | D | E | F |
|------------|-------|----------|-------|-----------|--------|
| Very Light | Light | Moderate | Heavy | Congested | Severe |

Spring 2010

SR 306 (Forsyth County) - Morning



A
Congestion Type: Platoons
Location: Between SR 369 and SR 400
Frequency: Intermittent
Direction: Westbound
Platoon Population: 25 to 40 vpl
Number of Lanes: 1

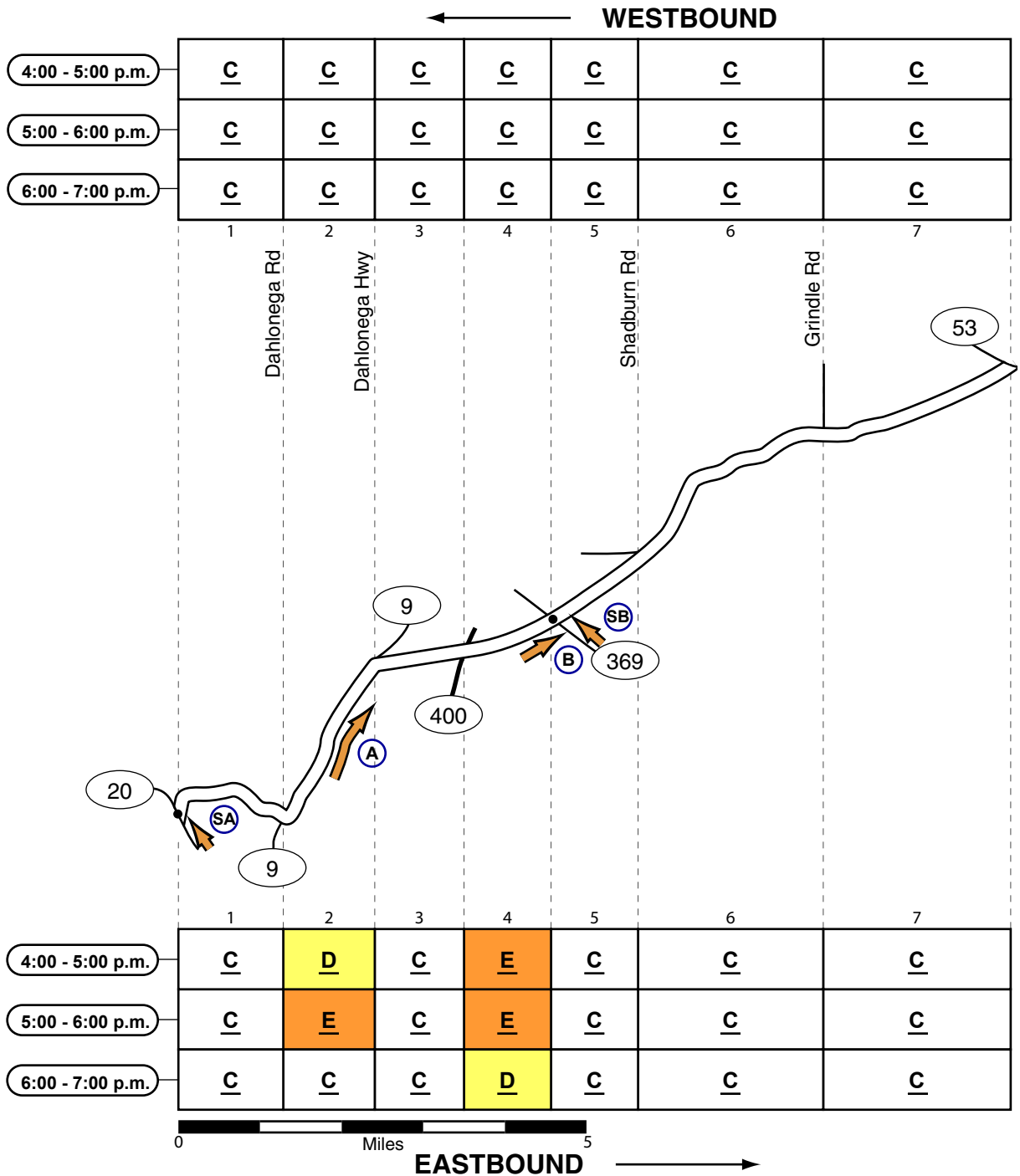
B
Congestion Type: Mainline Signal Queue
Location: SR 369
Frequency: Intermittent
Direction: Westbound
Queue Population: 25 to 35 vpl
Number of Lanes: 1

Arterial LOS Legend

| A | B | C | D | E | F |
|------------|-------|----------|-------|-----------|--------|
| Very Light | Light | Moderate | Heavy | Congested | Severe |

Spring 2010 SR 306 (Forsyth County) - Evening

PERFORMANCE RATINGS | 365



A
Congestion Type: Platoons
Location: Between Sawnee Dr & Keith Bridge Rd
Frequency: Peak Hour
Direction: Northbound
Platoon Population: 25 to 40 vpl
Number of Lanes: 1

B
Congestion Type: Mainline Signal Queue
Location: SR 369
Frequency: Intermittent
Direction: Eastbound
Queue Population: 20 to 30 vpl
Number of Lanes: 1

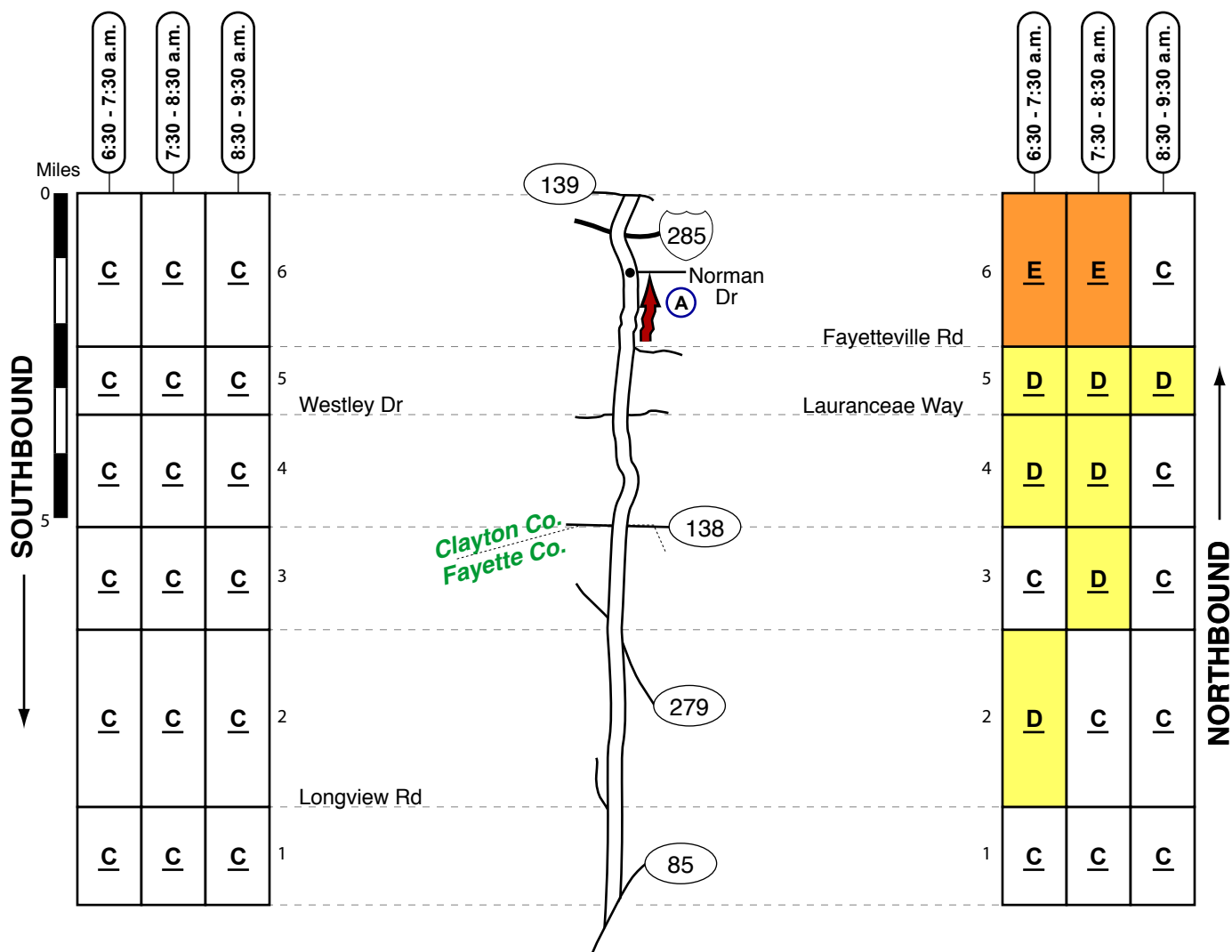
SA
Congestion Type: Surveyed Cross Road Signal Queue
Location: SR 20
Frequency: Intermittent
Direction: Northbound
Queue Population: 20 to 40 vpl
Number of Lanes: 1

SB
Congestion Type: Surveyed Cross Road Signal Queue
Location: SR 306
Frequency: Intermittent
Direction: Westbound
Queue Population: 20 to 30 vpl
Number of Lanes: 1
Note: Left-Turn Queue

Arterial LOS Legend

| A | B | C | D | E | F |
|------------|-------|----------|-------|-----------|--------|
| Very Light | Light | Moderate | Heavy | Congested | Severe |

SR 314 (Clayton & Fayette Counties) - Morning

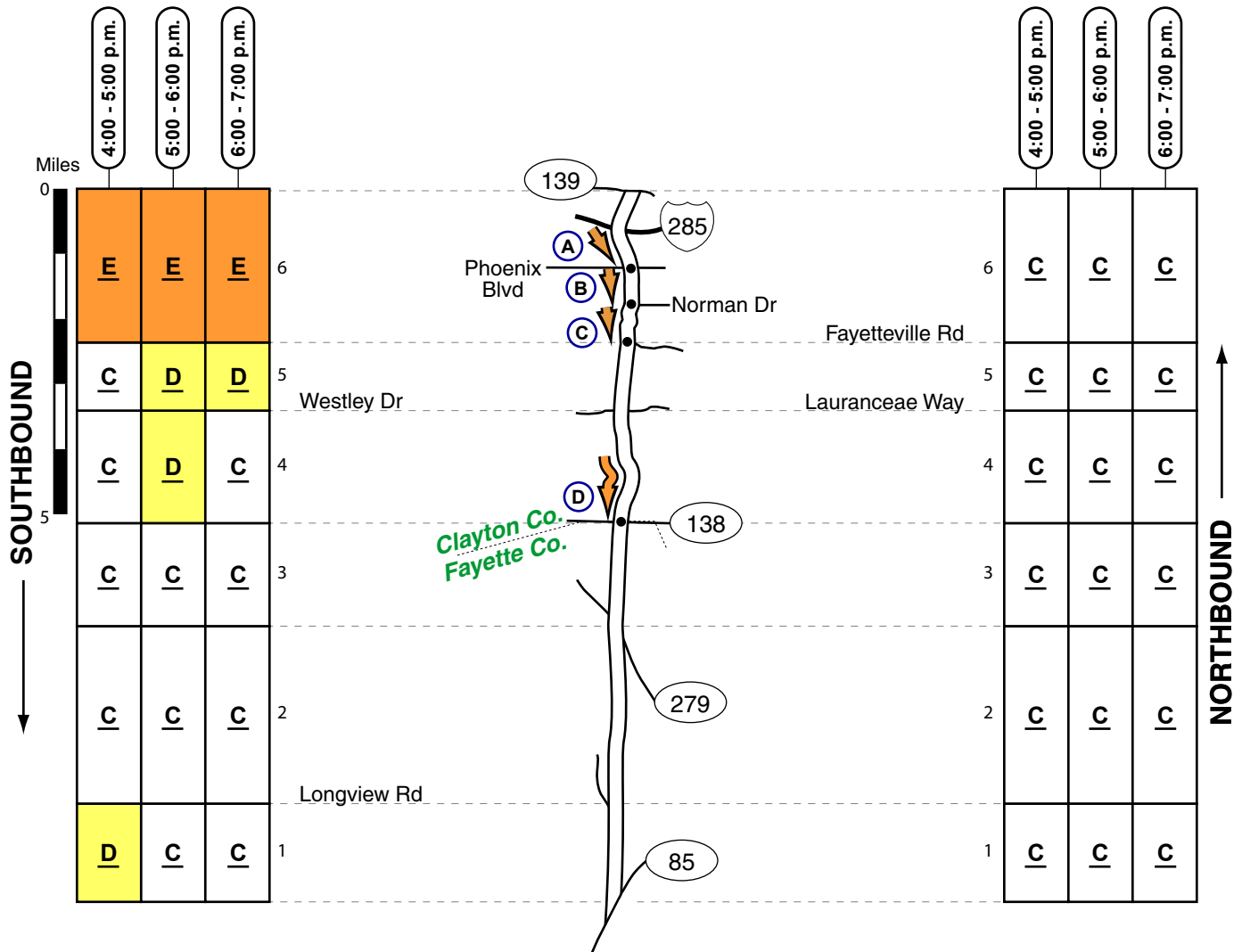


A
 Congestion Type: Mainline Signal Queue
 Location: Norman Dr
 Frequency: Most Observations
 Direction: Northbound
 Queue Population: 20 to 50 vpl
 Number of Lanes: 1

Arterial LOS Legend

| A | B | C | D | E | F |
|------------|-------|----------|-------|-----------|--------|
| Very Light | Light | Moderate | Heavy | Congested | Severe |

SR 314 (Clayton & Fayette Counties) - Evening



A
Congestion Type: Mainline Signal Queue
Location: Phoenix Blvd
Frequency: Intermittent
Direction: Southbound
Queue Population: 20 to 30 vpl
Number of Lanes: 1

D
Congestion Type: Mainline Signal Queue
Location: SR 138
Frequency: Intermittent
Direction: Southbound
Queue Population: 20 to 30 vpl
Number of Lanes: 1

B
Congestion Type: Mainline Signal Queue
Location: Norman Dr
Frequency: Intermittent
Direction: Southbound
Queue Population: 20 to 25 vpl
Number of Lanes: 1

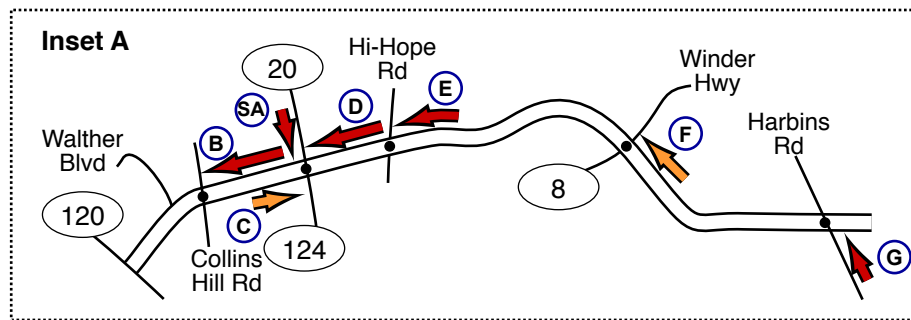
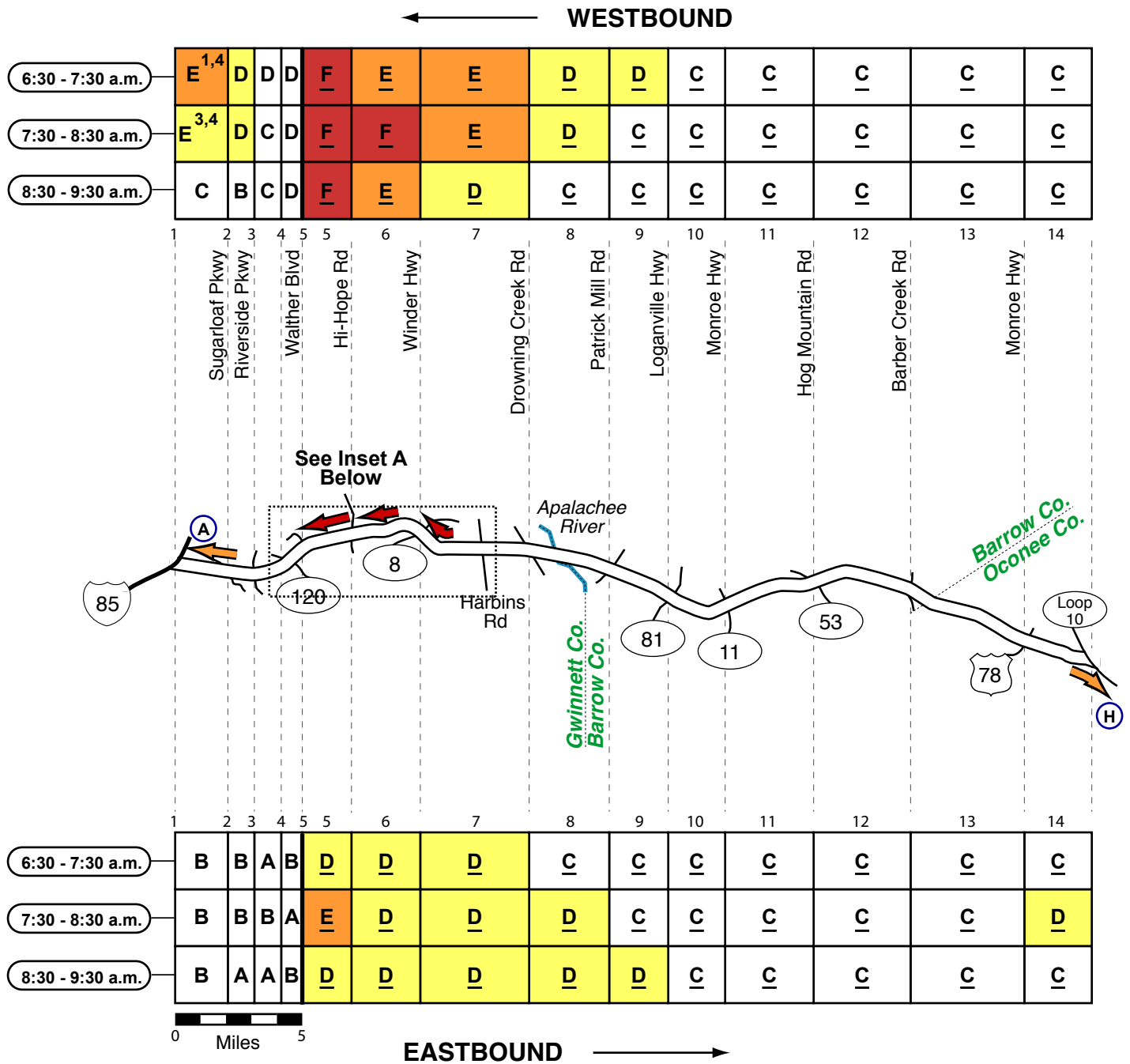
C
Congestion Type: Mainline Signal Queue
Location: Fayetteville Rd
Frequency: Intermittent
Direction: Southbound
Queue Population: 20 to 30 vpl
Number of Lanes: 1

Arterial LOS Legend

| A | B | C | D | E | F |
|------------|-------|----------|-------|-----------|--------|
| Very Light | Light | Moderate | Heavy | Congested | Severe |

Spring 2010

SR 316 (Gwinnett/Barrow & Oconee Counties) - Morning



Arterial LOS Legend

| | | | | | |
|------------|----------|----------|----------|-----------|----------|
| A | B | C | D | E | F |
| Very Light | Light | Moderate | Heavy | Congested | Severe |

SR 316 (Gwinnett/Barrow & Oconee Counties) - Morning

A

Congestion Type: Mainline Congestion
 Frequency: Most observations before 8:00 a.m.
 Direction: Westbound
 Location: Between Riverside Pkwy and I-85
 Queue Length: 2.5 to 3.5 miles
 Estimated Speed: 40 to 50 mph
 Potential Cause(s): Factors contributing to the congestion were:
 1) traffic entering at Riverside Pkwy and Sugarloaf Parkway and;
 2) the weaving associated with the HOV lane ramp at the I-85 interchange. On some days but not others, congestion was found on the mainline ramp to I-85.

B

Congestion Type: Mainline Signal Queue
 Location: Collins Hill Rd
 Frequency: Most Observations
 Direction: Westbound
 Queue Population: 20 to 65 vpl
 Number of Lanes: 2

C

Congestion Type: Mainline Signal Queue/Platoons
 Location: SR 20/SR 124
 Frequency: Intermittent
 Direction: Eastbound
 Queue Population: 20 to 30 vpl
 Number of Lanes: 2

D

Congestion Type: Mainline Signal Queue
 Location: SR 20/SR 124
 Frequency: Most Observations
 Direction: Westbound
 Queue Population: 20 to 70 vpl
 Number of Lanes: 2

E

Congestion Type: Mainline Signal Queue
 Location: Hi-Hope Rd
 Frequency: Most Observations
 Direction: Westbound
 Queue Population: 20 to 70 vpl
 Number of Lanes: 2

F

Congestion Type: Mainline Signal Queue
 Location: SR 8 (Winder Hwy)
 Frequency: Intermittent
 Direction: Westbound
 Queue Population: 20 to 40 vpl
 Number of Lanes: 2

G

Congestion Type: Cross Road Signal Queue
 Location: Harbins Rd
 Frequency: Peak Hour
 Direction: Northbound
 Queue Population: 20 to 30 vpl
 Number of Lanes: 1

H

Congestion Type: Platoons
 Location: Approaching Loop 10
 Frequency: Intermittent
 Direction: Eastbound
 Queue Population: 20 to 30 vpl
 Number of Lanes: 1
 Note: During some observations, eastbound congestion was found in the right lane (dedicated lane for vehicles entering the ramp to eastbound Loop 10) between Oconee Connector and SR 10.

SA

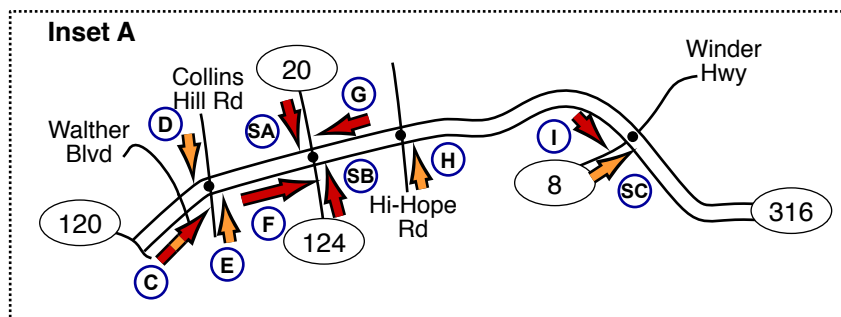
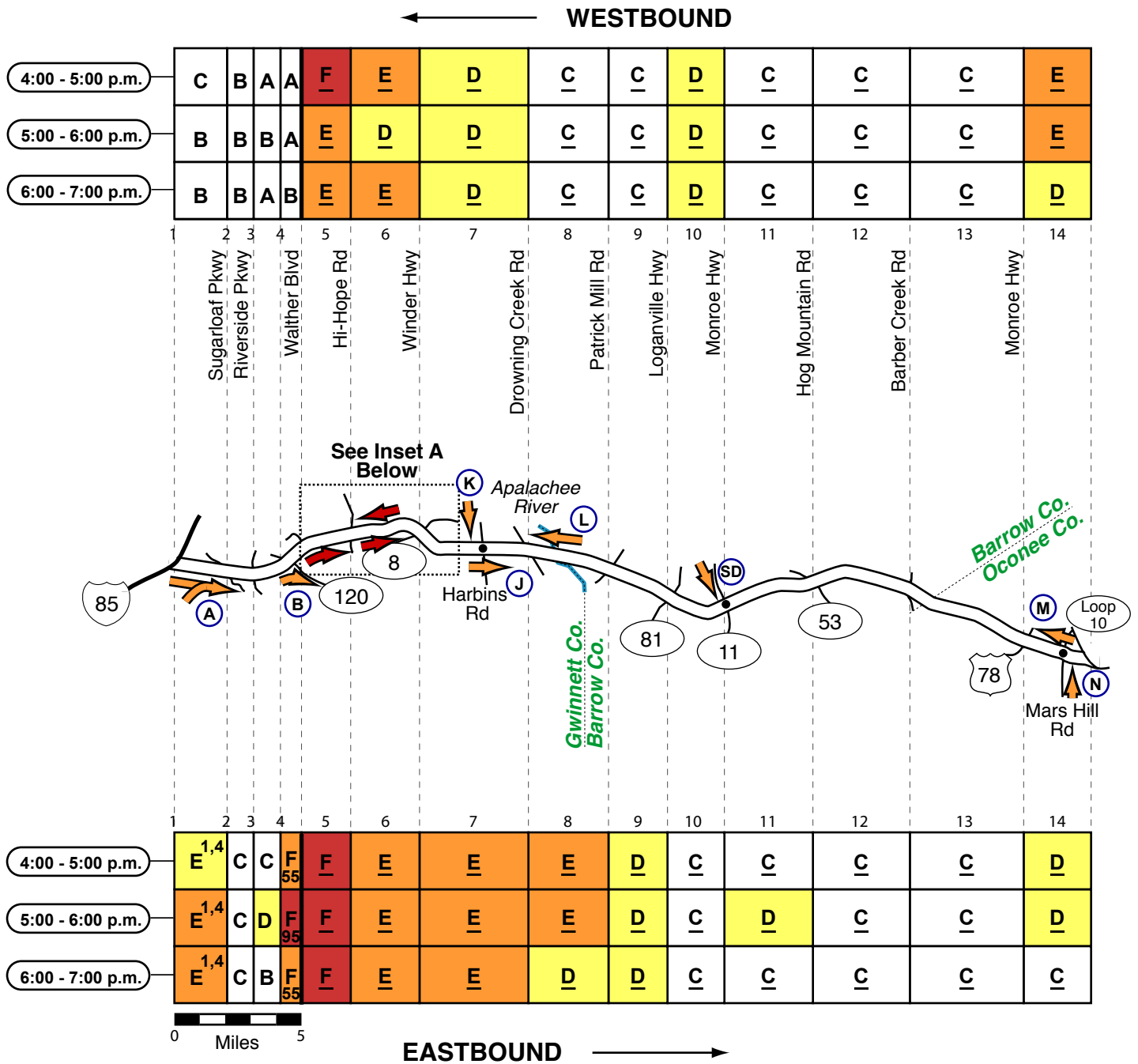
Congestion Type: Surveyed Cross Road Signal Queue
 Location: SR 20
 Frequency: Most observations after 7:00 a.m.
 Direction: Southbound
 Queue Population: 20 to 40 vpl
 Number of Lanes: 2
 Note: During one observation, congestion backed through the upstream signals at Swanson Dr and SR 124.

Arterial LOS Legend

| A | B | C | D | E | F |
|------------|-------|----------|-------|-----------|--------|
| Very Light | Light | Moderate | Heavy | Congested | Severe |

Spring 2010

SR 316 (Gwinnett/Barrow & Oconee Counties) - Evening



Arterial LOS Legend

| | | | | | |
|------------|----------|----------|----------|-----------|----------|
| A | B | C | D | E | F |
| Very Light | Light | Moderate | Heavy | Congested | Severe |

SR 316 (Gwinnett/Barrow & Oconee Counties) - Evening

A

Congestion Type: Mainline Congestion
 Frequency: On some days but not others
 Direction: Eastbound
 Location: Between I-85 and Sugarloaf Parkway
 Queue Length: 1 to 1.5 miles
 Estimated Speed: 30 to 50 mph
 Potential Cause(s): The primary bottleneck was found where traffic entered from Boggs Rd/I-85 Frontage Rd; while congestion persisted downstream of the merge, traffic flow typically improved.

B

Congestion Type: Exit Ramp Queue
 Location: SR 120 (Duluth Highway)
 Frequency: Intermittent
 Direction: Eastbound
 Queue Population: 25 to 50 vpl
 Number of Lanes: 1
 Note: The head of the queue was found in the right lane at the head of the ramp where traffic had to merge into congested southbound flow on SR 120.

C

Congestion Type: Mainline Signal Queue
 Location: Collins Hill Rd
 Frequency: Most Observations
 Direction: Eastbound
 Note: During the peak period, eastbound congestion approaching the signal at Collins Hill Rd extended back to the vicinity of SR 120 (a distance of approximately 1.5 miles).

D

Congestion Type: Cross Road Signal Queue
 Location: Collins Hill Rd
 Frequency: Intermittent
 Direction: Southbound
 Queue Population: 20 to 30 vpl
 Number of Lanes: 1

E

Congestion Type: Cross Road Signal Queue
 Location: Collins Hill Rd
 Frequency: Intermittent
 Direction: Northbound
 Queue Population: 20 to 30 vpl
 Number of Lanes: 1

F

Congestion Type: Mainline Signal Queue
 Location: SR 20/SR 124
 Frequency: Most Observations
 Direction: Eastbound
 Queue Population: 20 to 70 vpl
 Number of Lanes: 2
 Note: During some observations, congestion backed through the upstream signal at Collins Hill Rd.

G

Congestion Type: Mainline Signal Queue
 Location: SR 20/SR 124
 Frequency: Most Observations
 Direction: Westbound
 Queue Population: 20 to 60 vpl
 Number of Lanes: 2

H

Congestion Type: Cross Road Signal Queue
 Location: Hi-Hope Rd
 Frequency: Intermittent
 Direction: Northbound
 Queue Population: 20 to 35 vpl
 Number of Lanes: 1

I

Congestion Type: Mainline Signal Queue
 Location: SR 8 (Winder Hwy)
 Frequency: Peak Hour
 Direction: Eastbound
 Queue Population: 20 to 40 vpl
 Number of Lanes: 2

J

Congestion Type: Platoons
 Location: Between SR 8 (Winder Hwy) & Downing Creek Rd
 Frequency: Most Observations
 Direction: Eastbound
 Queue Population: 25 to 35 vpl
 Number of Lanes: 2

K

Congestion Type: Cross Road Signal Queue
 Location: Harbins Rd
 Frequency: Intermittent
 Direction: Southbound
 Queue Population: 20 to 30 vpl
 Number of Lanes: 1

L

Congestion Type: Platoons
 Location: Between Patrick Mill Rd & Drowning Creek Rd
 Frequency: Intermittent
 Direction: Westbound
 Platoon Population: 25 to 35 vpl
 Number of Lanes: 2

M

Congestion Type: Platoons/Mainline Signal Queue
 Location: Vicinity of Oconee Connector
 Frequency: Intermittent
 Direction: Westbound
 Platoon Population: 20 to 30 vpl
 Number of Lanes: 2

N

Congestion Type: Cross Road Signal Queue
 Location: Mars Hill Rd (Oconee Connector)
 Frequency: Intermittent
 Direction: Northbound
 Queue Population: 20 to 30 vpl
 Number of Lanes: 1
 Note: When congested, vehicles were queued in the dedicated left turn lane at the signal.

SA

Congestion Type: Surveyed Cross Road Signal Queue
 Location: SR 20
 Frequency: Most Observations
 Direction: Southbound
 Queue Population: 20 to 50 vpl
 Number of Lanes: 2

SB

Congestion Type: Surveyed Cross Road Signal Queue
 Location: SR 124
 Frequency: Most Observations
 Direction: Northbound
 Queue Population: 20 to 50 vpl
 Number of Lanes: 2

SC

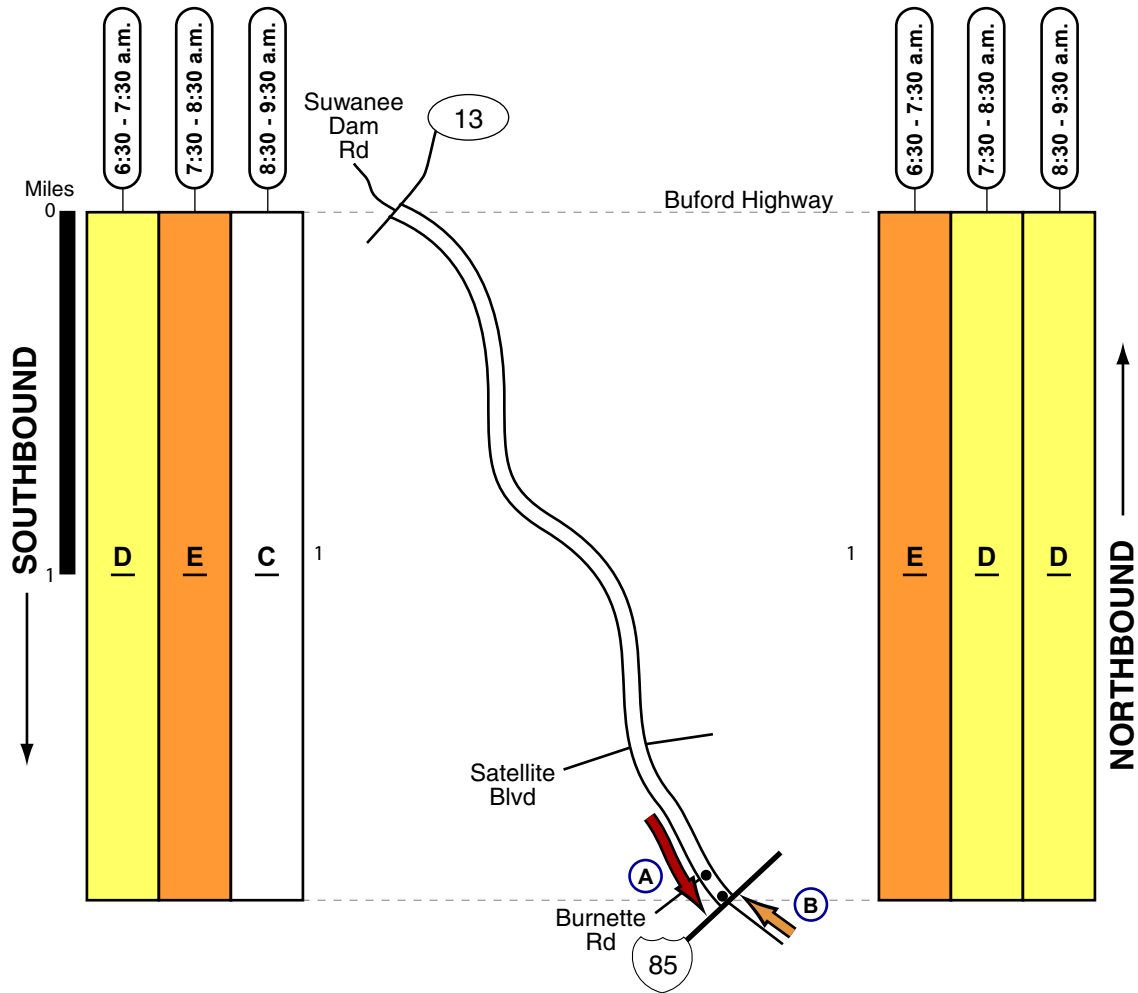
Congestion Type: Surveyed Cross Road Signal Queue
 Location: SR 8
 Frequency: Intermittent
 Direction: Eastbound
 Queue Population: 20 to 40 vpl
 Number of Lanes: 1

SD

Congestion Type: Surveyed Cross Road Signal Queue
 Location: SR 11
 Frequency: Intermittent
 Direction: Southbound
 Queue Population: 20 to 25 vpl
 Number of Lanes: 1

Spring 2010

SR 317 (Gwinnett County) - Morning



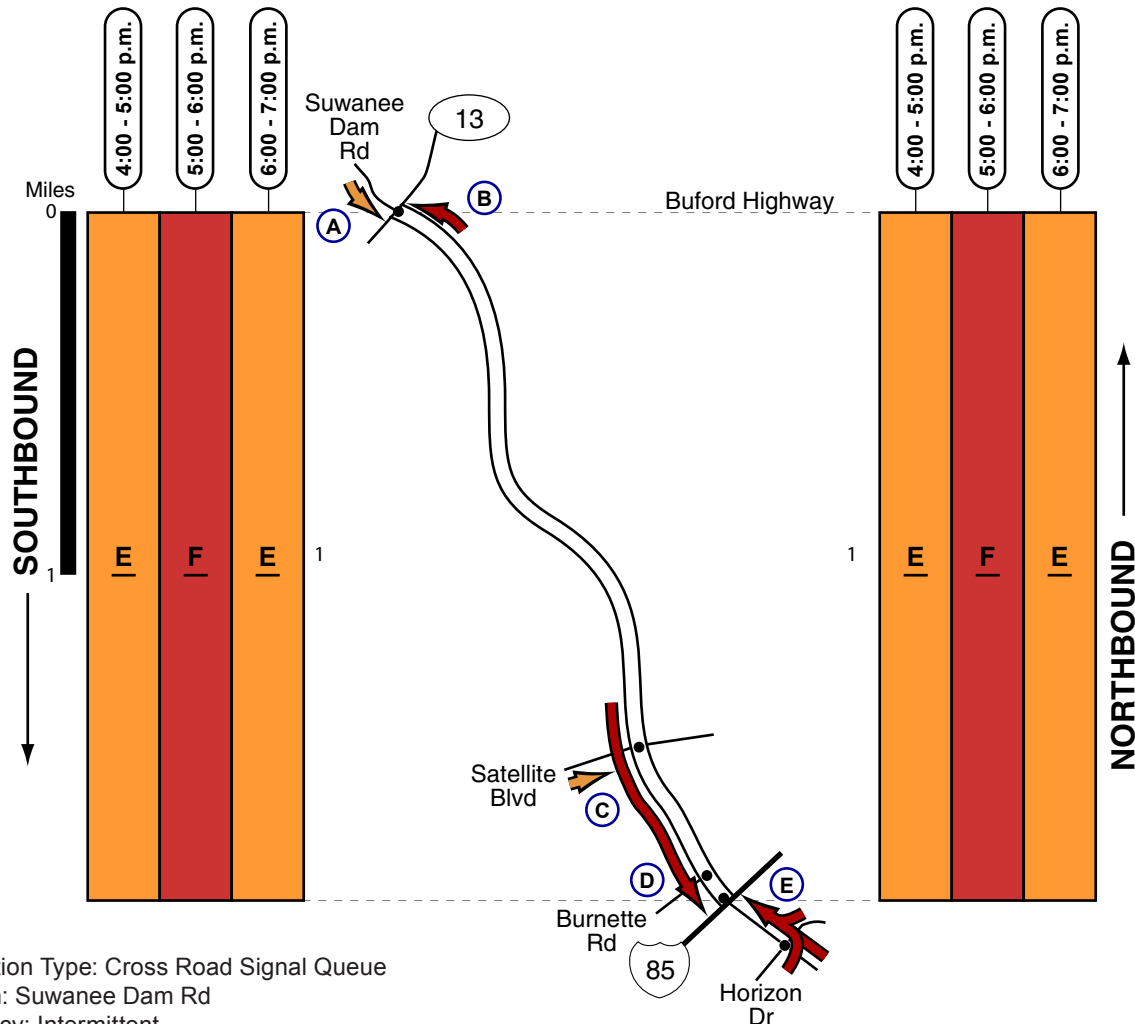
A
Congestion Type: Mainline Signal Queue
Location: I-85
Frequency: Peak Hour
Direction: Southbound
Queue Population: 20 to 30 vpl
Number of Lanes: 2
Note: The head of the queue was found at one of the two closely spaced signals at Burnette Rd and I-85.

B
Congestion Type: Mainline Signal Queue
Location: I-85
Frequency: Intermittent
Direction: Northbound
Queue Population: 20 to 30 vpl
Number of Lanes: 2

Arterial LOS Legend

| A | B | C | D | E | F |
|------------|-------|----------|-------|-----------|--------|
| Very Light | Light | Moderate | Heavy | Congested | Severe |

SR 317 (Gwinnett County) - Evening



A
 Congestion Type: Cross Road Signal Queue
 Location: Suwanee Dam Rd
 Frequency: Intermittent
 Direction: Southbound
 Queue Population: 20 to 40 vpl
 Number of Lanes: 2
 Note: The head of the queue was found at the signal at SR 13 or the railroad tracks north of the signal.

B
 Congestion Type: Mainline Signal Queue
 Location: SR 13
 Frequency: Most observations before 6:00 p.m.
 Direction: Northbound
 Queue Population: 20 to 40 vpl
 Number of Lanes: 2
 Note: The head of the queue was typically found at the signal at SR 13. During one observation only, the head of the queue was found at the railroad crossing north of the intersection; the queue approaching the crossing contained approximately 85 vehicles.

C
 Congestion Type: Cross Road Signal Queue
 Location: Satellite Blvd
 Frequency: Intermittent
 Direction: Eastbound
 Queue Population: 20 to 30 vpl
 Number of Lanes: 2

D
 Congestion Type: Mainline Signal Queue
 Location: I-85 & Burnette Rd
 Frequency: Most Observations
 Direction: Southbound
 Queue Population: 50 to 100 vpl
 Number of Lanes: 2
 Note: During the peak period, southbound congestion approaching the signal at I-85 typically backed through the signal at Satellite Blvd (a distance of approximately 1/2 mile).

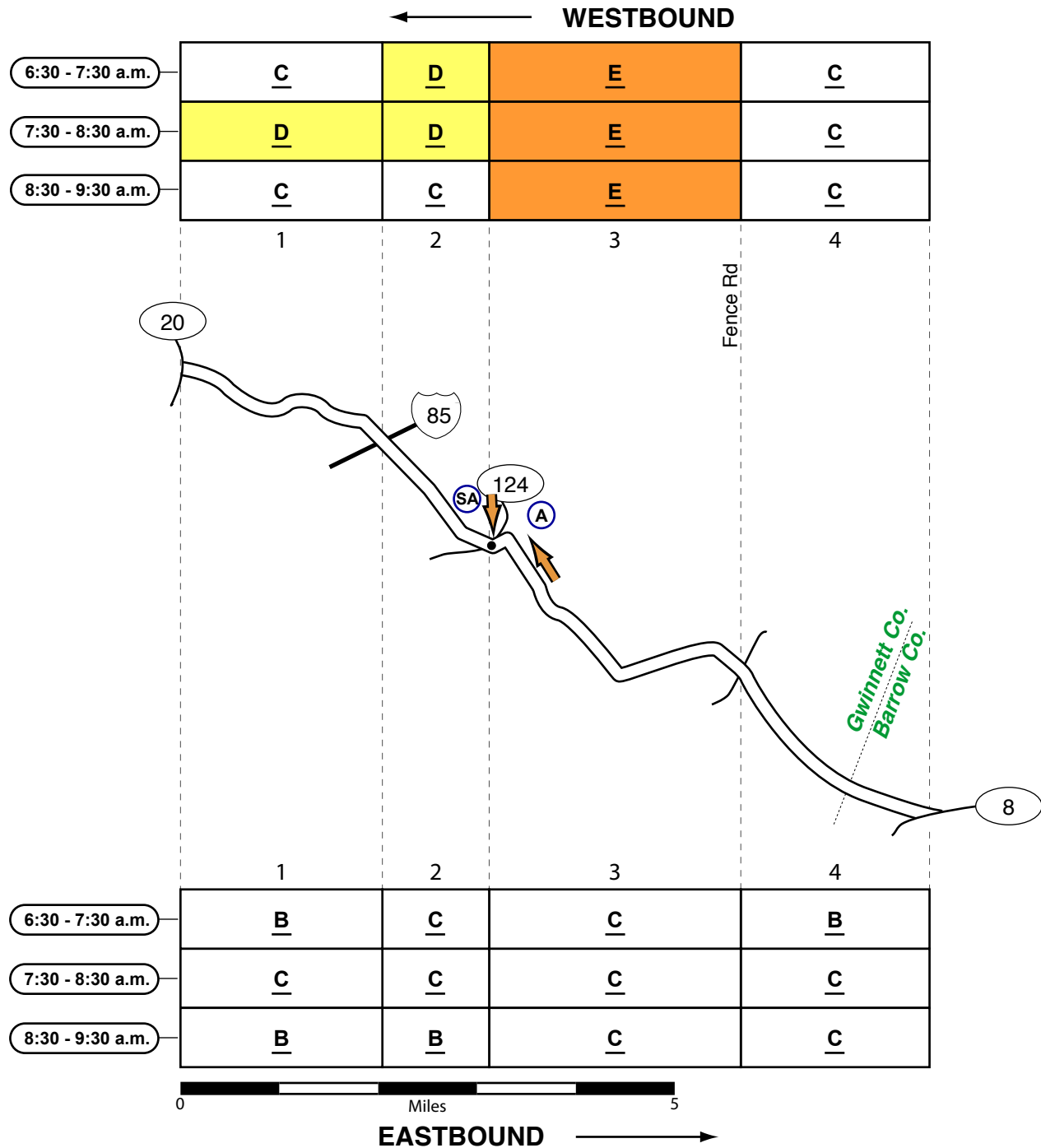
E
 Congestion Type: Mainline Signal Queue
 Location: I-85
 Frequency: Most Observations
 Direction: Northbound
 Queue Population: 20 to 50 vpl
 Number of Lanes: 2
 Note: During most observations, northbound congestion on SR 317 approaching the signals at I-85 extended back through the upstream signal at Horizon Dr; congestion was also found in both directions on Horizon Dr approaching the signal at SR 317.

Arterial LOS Legend

| A | B | C | D | E | F |
|------------|-------|----------|-------|-----------|--------|
| Very Light | Light | Moderate | Heavy | Congested | Severe |

(Blank)

SR 324 (Gwinnett & Barrow Counties) - Morning



A

Congestion Type: Platoons
 Location: Between Fence Rd & SR 124
 Frequency: Peak Hour
 Direction: Westbound
 Platoon Population: 25 to 35 vpl
 Number of Lanes: 1

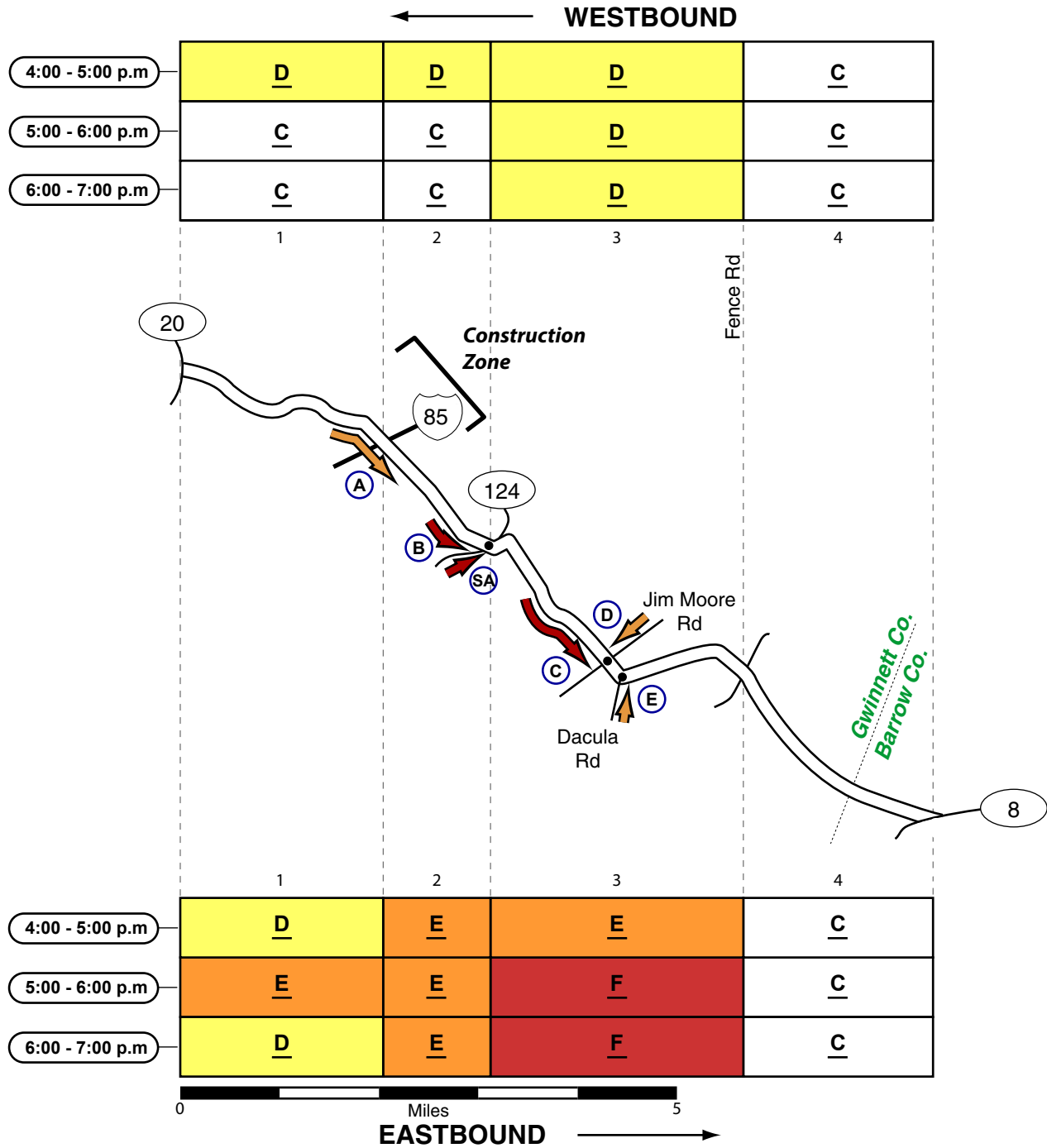
SA

Congestion Type: Surveyed Cross Road Signal Queue
 Location: SR 124
 Frequency: Intermittent
 Direction: Southbound
 Queue Population: 20 to 30 vpl
 Number of Lanes: 1

Arterial LOS Legend

| | | | | | |
|------------|----------|----------|----------|-----------|----------|
| <u>A</u> | <u>B</u> | <u>C</u> | <u>D</u> | <u>E</u> | <u>F</u> |
| Very Light | Light | Moderate | Heavy | Congested | Severe |

SR 324 (Gwinnett & Barrow Counties) - Evening



SR 324 (Gwinnett & Barrow Counties) - Evening

A

Congestion Type: Platoons

Location: Vicinity of I-85

Frequency: Intermittent

Direction: Eastbound

Queue Population: 25 to 35 vpl

Number of Lanes: 1

Note: Construction on SR 324 in the vicinity of I-85 may have caused or exacerbated the congestion.

B

Congestion Type: Mainline Signal Queue

Location: SR 124

Frequency: Most Observations

Direction: Eastbound

Queue Population: 20 to 50 vpl

Number of Lanes: 1

C

Congestion Type: Mainline Signal Queue

Location: Jim Moore Rd

Frequency: Most Observations

Direction: Eastbound

Queue Population: 30 to 70 vpl

Number of Lanes: 1

D

Congestion Type: Cross Road Signal Queue

Location: Jim Moore Rd

Frequency: Intermittent

Direction: Southbound

Queue Population: 20 to 25 vpl

Number of Lanes: 1

E

Congestion Type: Cross Road Signal Queue

Location: Dacula Rd

Frequency: Intermittent

Direction: Northbound

Queue Population: 20 to 30 vpl

Number of Lanes: 1

SA

Congestion Type: Surveyed Cross Road Signal Queue

Location: SR 124

Frequency: Most Observations

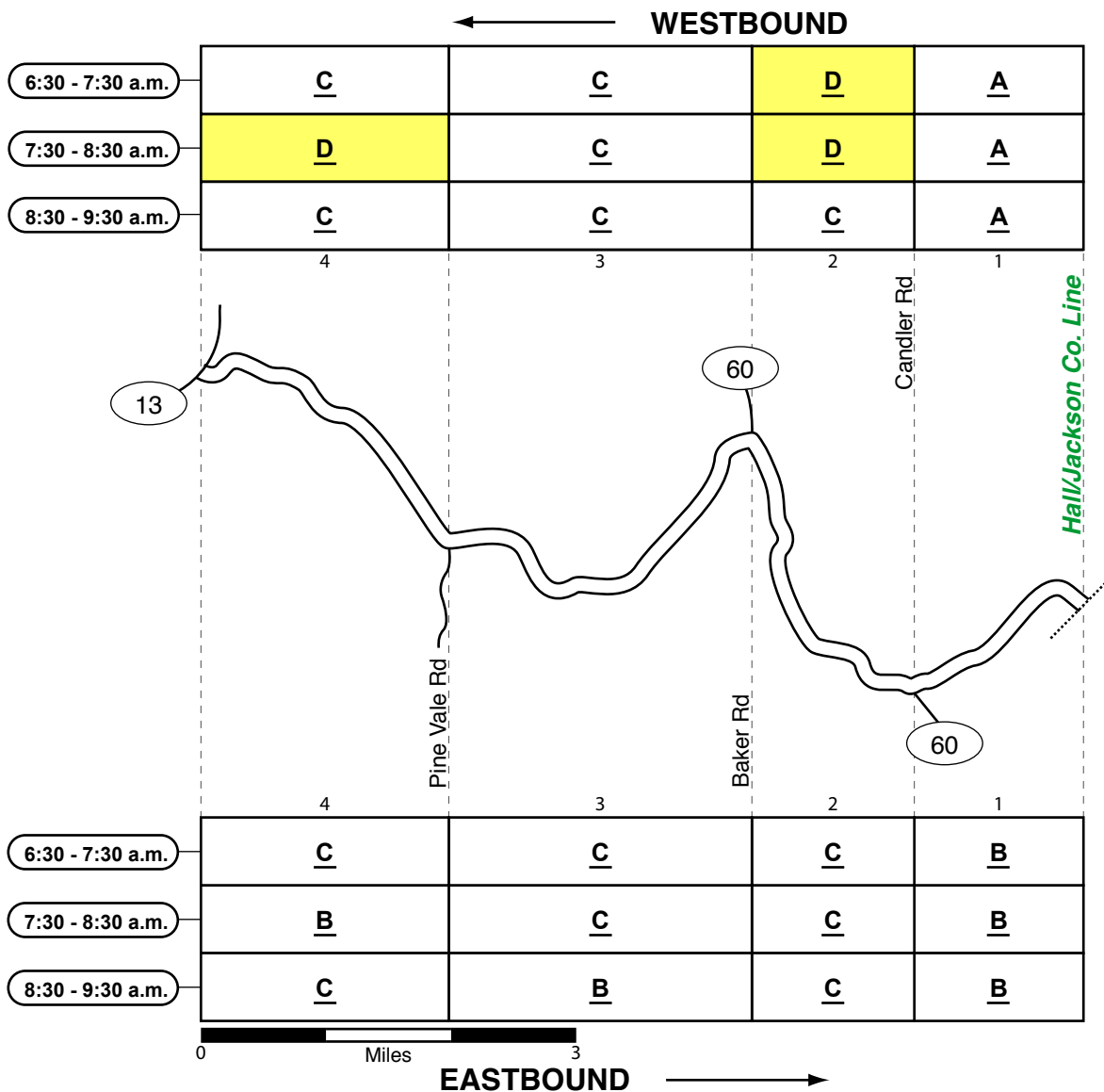
Direction: Northbound

Queue Population: 20 to 40 vpl

Number of Lanes: 1

Note: During one observation only, the contained approximately 80 vehicles.

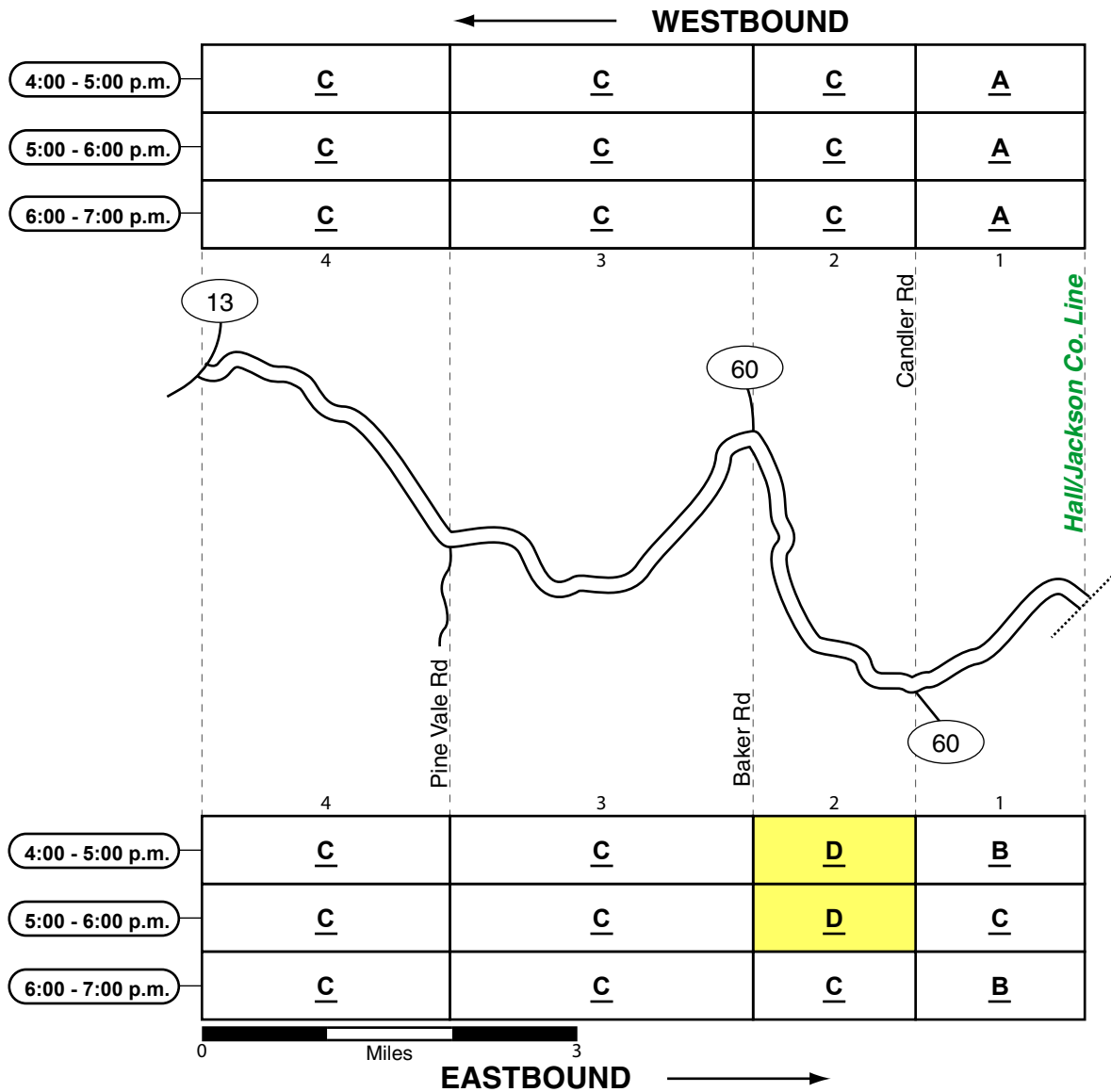
SR 332 (Hall County) - Morning



Arterial LOS Legend

| A | B | C | D | E | F |
|------------|-------|----------|-------|-----------|--------|
| Very Light | Light | Moderate | Heavy | Congested | Severe |

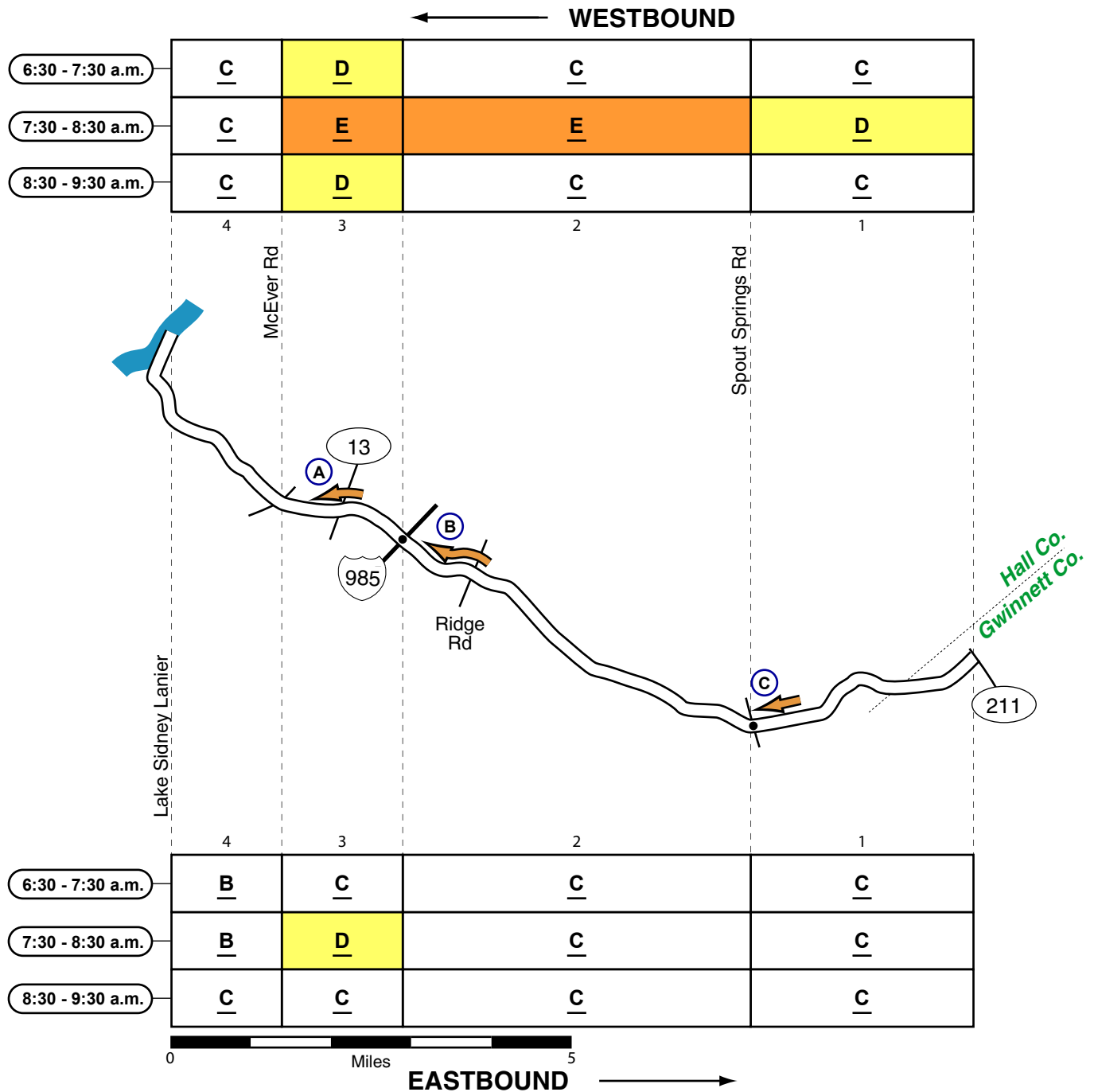
Spring 2010 SR 332 (Hall County) - Evening



Arterial LOS Legend

| | | | | | |
|------------|----------|----------|----------|-----------|----------|
| <u>A</u> | <u>B</u> | <u>C</u> | <u>D</u> | <u>E</u> | <u>F</u> |
| Very Light | Light | Moderate | Heavy | Congested | Severe |

Spring 2010

SR 347 (Hall & Gwinnett Counties) - Morning

A
 Congestion Type: Platoons
 Location: Between I-985 & McEver Rd
 Frequency: Intermittent
 Direction: Westbound
 Platoon Population: 25 to 30 vpl
 Number of Lanes: 1

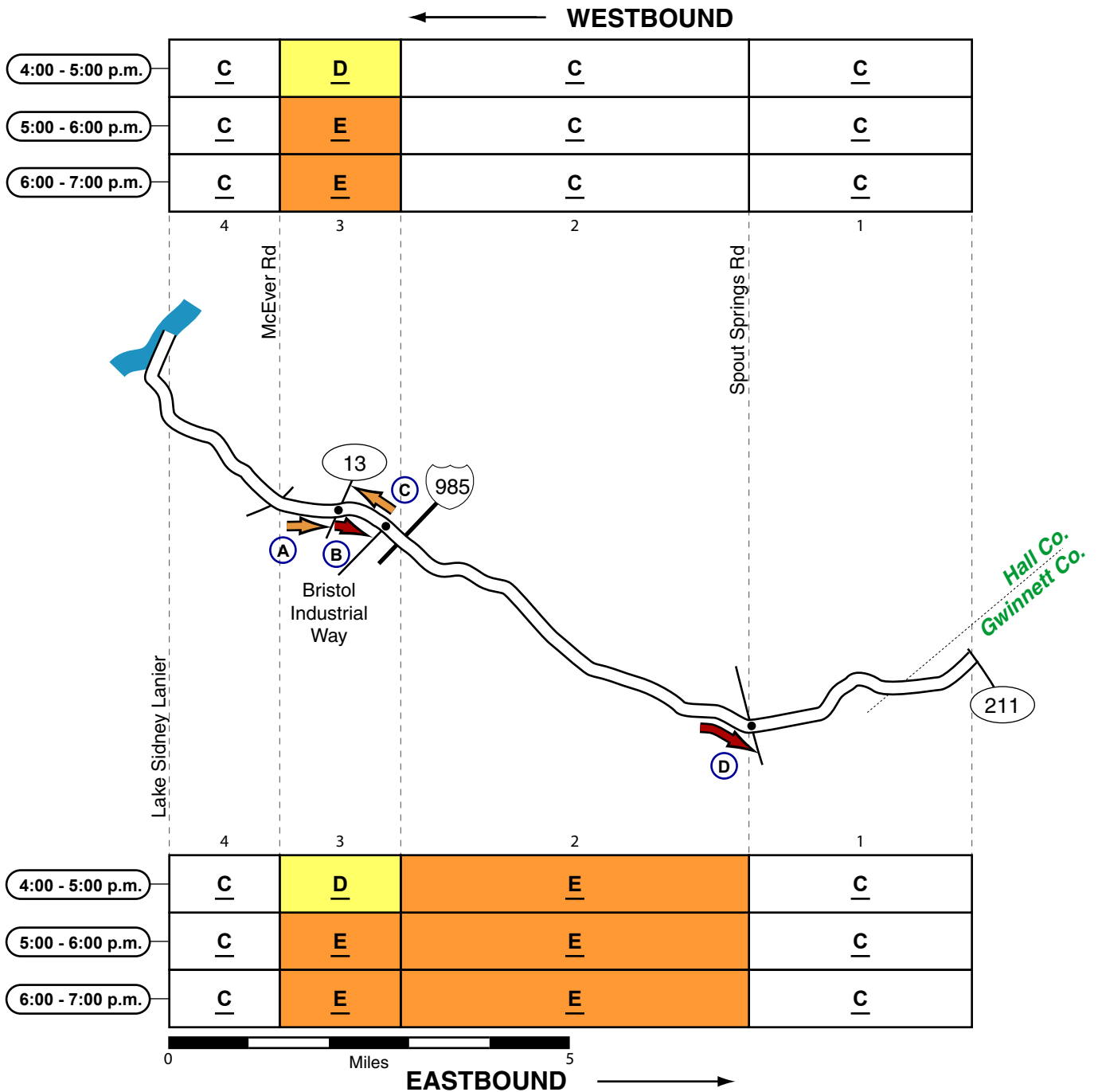
B
 Congestion Type: Platoons
 Location: Between Spout Springs Rd & I-985
 Frequency: Intermittent
 Direction: Westbound
 Platoon Population: 25 to 45 vpl
 Number of Lanes: 1

C
 Congestion Type: Mainline Signal Queue
 Location: Spout Springs Rd
 Frequency: One time only
 Direction: Westbound
 Queue Population: 20 to 25 vpl
 Number of Lanes: 1

Arterial LOS Legend

| <u>A</u> | <u>B</u> | <u>C</u> | <u>D</u> | <u>E</u> | <u>F</u> |
|------------|----------|----------|----------|-----------|----------|
| Very Light | Light | Moderate | Heavy | Congested | Severe |

SR 347 (Hall & Gwinnett Counties) - Evening



A
 Congestion Type: Mainline Signal Queue
 Location: SR 13
 Frequency: Intermittent
 Direction: Eastbound
 Queue Population: 20 to 30 vpl
 Number of Lanes: 1

B
 Congestion Type: Mainline Signal Queue
 Location: Bristol Industrial Way
 Frequency: Peak Hour
 Direction: Eastbound
 Queue Population: 25 to 60 vpl
 Number of Lanes: 1

C
 Congestion Type: Platoons
 Location: Between I-985 & McEver Rd
 Frequency: Intermittent
 Direction: Westbound
 Platoon Population: 25 to 35 vpl
 Number of Lanes: 1

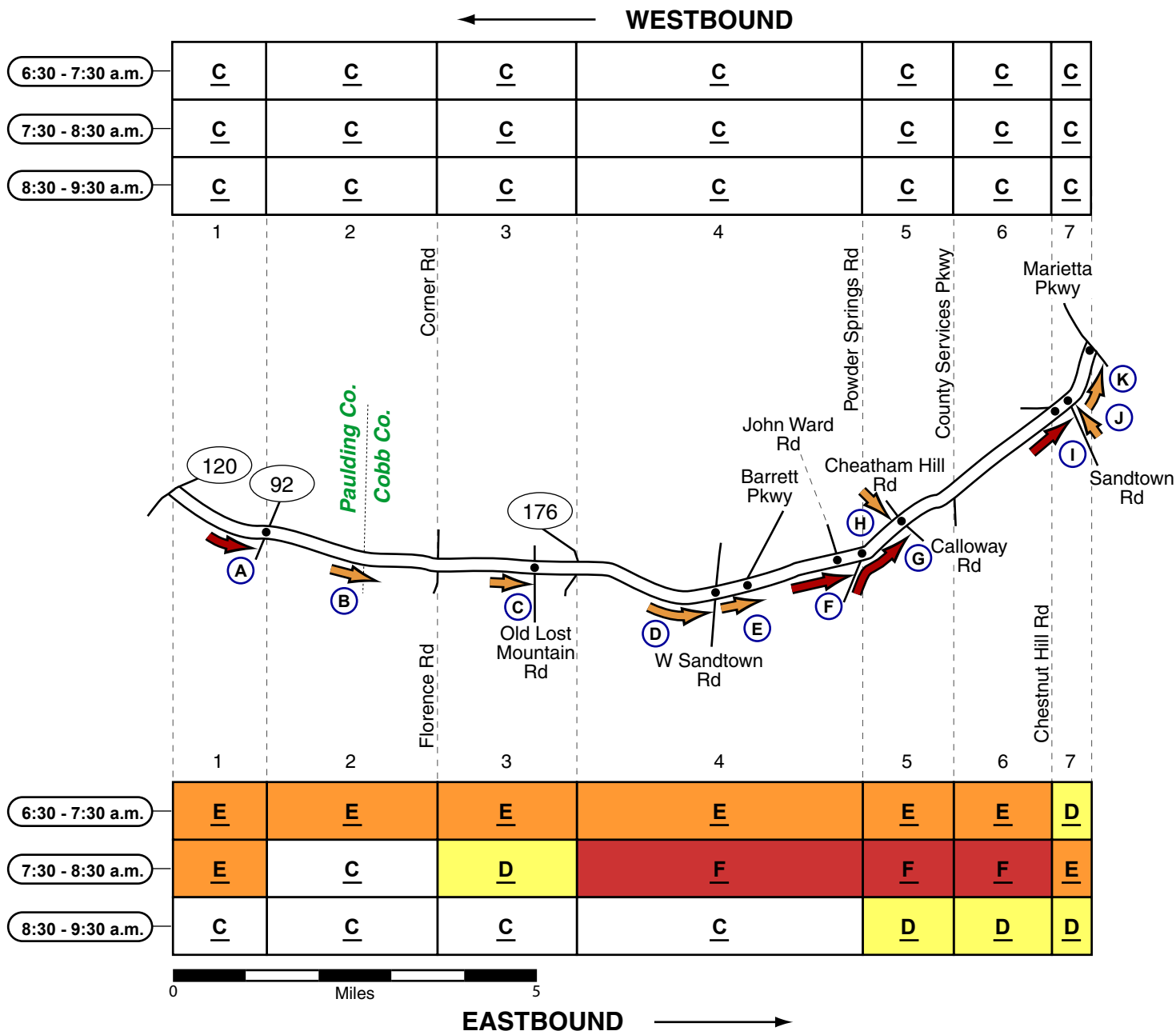
D
 Congestion Type: Mainline Signal Queue
 Location: Spout Springs Rd
 Frequency: Most Observations
 Direction: Southbound
 Queue Population: 20 to 40 vpl
 Number of Lanes: 1

Arterial LOS Legend

| A | B | C | D | E | F |
|------------|-------|----------|-------|-----------|--------|
| Very Light | Light | Moderate | Heavy | Congested | Severe |

Spring 2010

SR 360 (Paulding & Cobb Counties) - Morning



Arterial LOS Legend

| A | B | C | D | E | F |
|------------|-------|----------|-------|-----------|--------|
| Very Light | Light | Moderate | Heavy | Congested | Severe |

SR 360 (Paulding & Cobb Counties) - Morning**A**

Congestion Type: Mainline Signal Queue
Location: SR 92
Frequency: Most observations before 8:00 a.m.
Direction: Eastbound
Queue Population: 20 to 45 vpl
Number of Lanes: 1

B

Congestion Type: Platoons
Location: Between SR 92 & Florence Rd
Frequency: Intermittent
Direction: Eastbound
Platoon Population: 25 to 40 vpl
Number of Lanes: 1

C

Congestion Type: Mainline Signal Queue
Location: Old Lost Mountain Rd
Frequency: Intermittent (before 7:30 a.m.)
Direction: Eastbound
Queue Population: 20 to 30 vpl
Number of Lanes: 1

D

Congestion Type: Mainline Signal Queue
Location: W. Sandtown Rd
Frequency: Intermittent
Direction: Eastbound
Queue Population: 40 to 60 vpl
Number of Lanes: 2

E

Congestion Type: Mainline Signal Queue
Location: Barrett Pkwy
Frequency: Intermittent
Direction: Eastbound
Queue Population: 20 to 40 vpl
Number of Lanes: 2

F

Congestion Type: Mainline Signal Queue
Location: Powder Springs Rd & John Ward Rd
Frequency: Most observations (before 8:30 a.m.)
Direction: Eastbound
Queue Population: 20 to 100 vpl
Number of Lanes: 2

G

Congestion Type: Mainline Signal Queue
Location: Cheatham Hill Rd
Frequency: Most observations
Direction: Eastbound
Number of Lanes: 2
Note: During the peak period, a 1/2 to 1 mile zone of congestion was found approaching the signal at Cheatham Rd; congestion typically extended back through the upstream signals at Oxford Rd and Powder Springs Rd.

H

Congestion Type: Cross Road Signal Queue
Location: Cheatham Hill Rd
Frequency: Intermittent
Direction: Southbound
Queue Population: 20 to 25 vpl
Number of Lanes: 2

I

Congestion Type: Mainline Signal Queue
Location: Chestnut Hill Rd & Sandtown Rd SW
Frequency: Most observations
Direction: Eastbound
Queue Population: 30 to 80 vpl
Number of Lanes: 2

J

Congestion Type: Cross Road Signal Queue
Location: Sandtown Rd SW
Frequency: Intermittent
Direction: Northbound
Queue Population: 20 to 30 vpl
Number of Lanes: 1

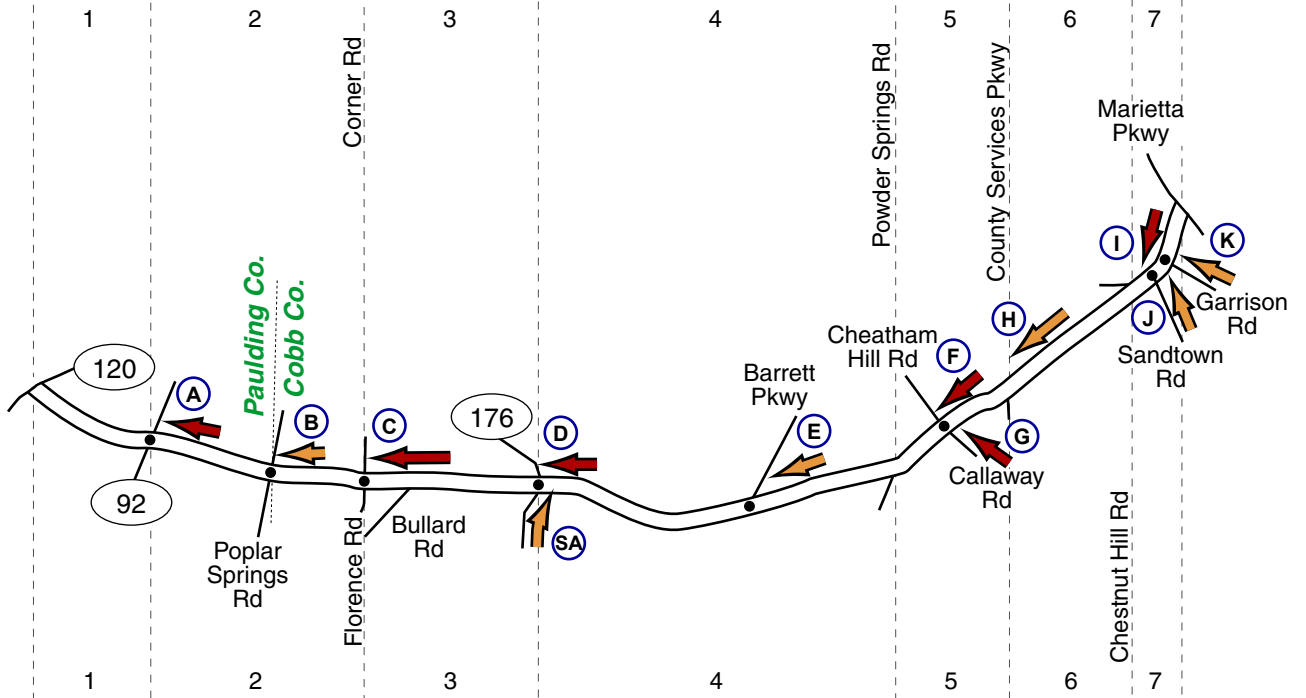
K

Congestion Type: Mainline Signal Queue
Location: Marietta Parkway
Frequency: Intermittent
Direction: Eastbound
Queue Population: 20 to 30 vpl
Number of Lanes: 2

SR 360 (Paulding & Cobb Counties) - Evening

← WESTBOUND

| | | | | | | | |
|------------------|----------|----------|----------|----------|----------|----------|----------|
| 4:00 - 5:00 p.m. | <u>D</u> | <u>D</u> | <u>D</u> | <u>E</u> | <u>E</u> | <u>D</u> | <u>E</u> |
| 5:00 - 6:00 p.m. | <u>D</u> | <u>F</u> | <u>E</u> | <u>E</u> | <u>F</u> | <u>E</u> | <u>E</u> |
| 6:00 - 7:00 p.m. | <u>D</u> | <u>E</u> | <u>E</u> | <u>E</u> | <u>D</u> | <u>D</u> | <u>C</u> |



| | | | | | | | |
|------------------|----------|----------|----------|----------|----------|----------|----------|
| 4:00 - 5:00 p.m. | <u>C</u> | <u>C</u> | <u>C</u> | <u>C</u> | <u>C</u> | <u>C</u> | <u>C</u> |
| 5:00 - 6:00 p.m. | <u>C</u> | <u>C</u> | <u>C</u> | <u>C</u> | <u>C</u> | <u>C</u> | <u>C</u> |
| 6:00 - 7:00 p.m. | <u>C</u> | <u>C</u> | <u>C</u> | <u>C</u> | <u>C</u> | <u>C</u> | <u>C</u> |



→ EASTBOUND

Arterial LOS Legend

| | | | | | |
|------------|----------|----------|----------|-----------|----------|
| <u>A</u> | <u>B</u> | <u>C</u> | <u>D</u> | <u>E</u> | <u>F</u> |
| Very Light | Light | Moderate | Heavy | Congested | Severe |

SR 360 (Paulding & Cobb Counties) - Evening**A**

Congestion Type: Mainline Signal Queue
Location: SR 92
Frequency: Most observations
Direction: Westbound
Queue Population: 20 to 50 vpl
Number of Lanes: 1

B

Congestion Type: Mainline Signal Queue
Location: Poplar Springs Rd
Frequency: Intermittent
Direction: Westbound
Queue Population: 20 to 25 vpl
Number of Lanes: 1

C

Congestion Type: Mainline Signal Queue
Location: Corner Rd / Florence Rd
Frequency: Most Observations
Direction: Westbound
Queue Population: 20 to 60 vpl
Number of Lanes: 1

D

Congestion Type: Mainline Signal Queue
Location: SR 176
Frequency: Most Observations
Direction: Westbound
Queue Population: 20 to 40 vpl
Number of Lanes: 1

E

Congestion Type: Mainline Signal Queue
Location: Barrett Pkwy
Frequency: Intermittent
Direction: Westbound
Queue Population: 20 to 30 vpl
Number of Lanes: 2

F

Congestion Type: Mainline Signal Queue
Location: Cheatham Hill Rd
Frequency: Most observations
Direction: Westbound
Queue Population: 20 to 70 vpl
Number of Lanes: 2

G

Congestion Type: Cross Road Signal Queue
Location: Callaway Rd
Frequency: Most observations
Direction: Northbound
Queue Population: 20 to 60 vpl
Number of Lanes: 2

H

Congestion Type: Platoons
Location: Between Chestnut Hill Rd and County Services Parkway
Frequency: Peak hour
Direction: Westbound
Platoon Population: 25 to 35 vpl
Number of Lanes: 2

I

Congestion Type: Mainline Signal Queue
Location: Sandtown Rd SW
Frequency: Peak Hour
Direction: Westbound
Queue Population: 20 to 50 vpl
Number of Lanes: 2
Note: During some observations, congestion backed through the upstream signals at Garrison Rd and Gramling St.

J

Congestion Type: Cross Road Signal Queue
Location: Sandtown Rd SW
Frequency: Intermittent
Direction: Northbound
Queue Population: 20 to 25 vpl
Number of Lanes: 1
Note: Congestion was typically limited to the left lane (left-turn/ thru lane).

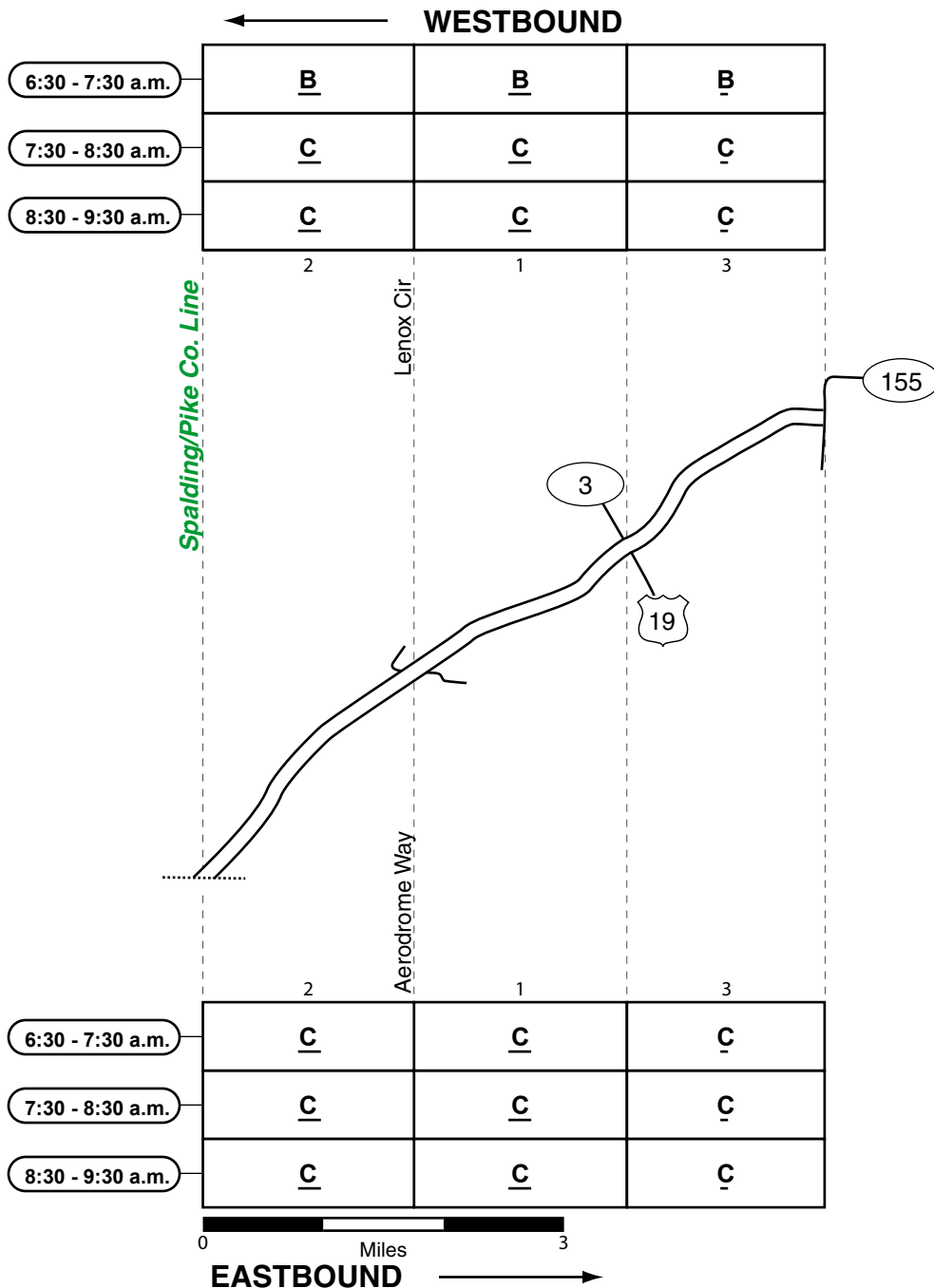
K

Congestion Type: Cross Road Signal Queue
Location: Garrison Rd
Frequency: Intermittent
Direction: Northbound
Queue Population: 20 to 30 vpl
Number of Lanes: 2

SA

Congestion Type: Surveyed Cross Road Signal Queue
Location: SR 176
Frequency: Intermittent
Direction: Northbound
Queue Population: 20 to 30 vpl
Number of Lanes: 1

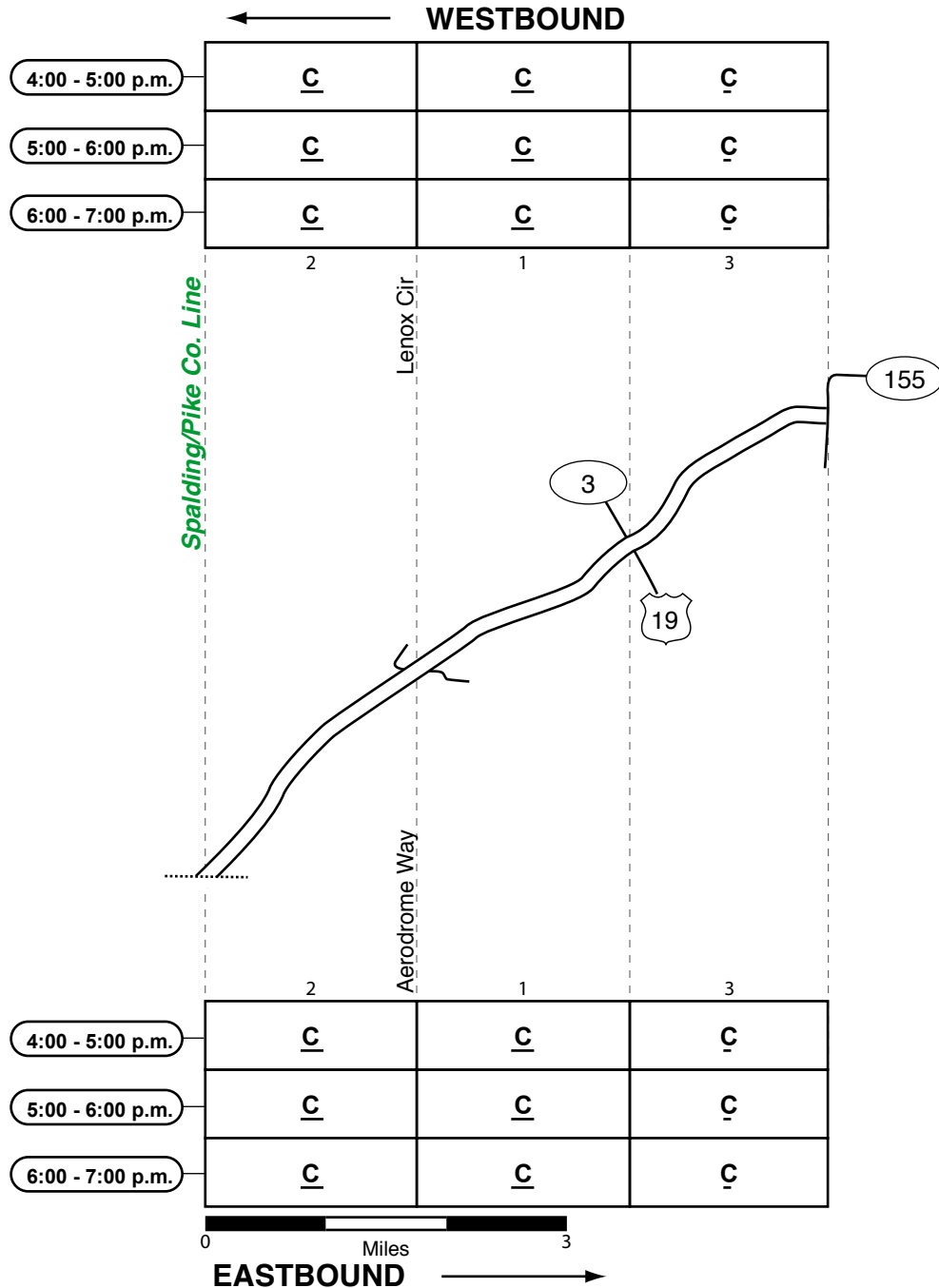
SR 362 (Spalding County) - Morning



Arterial LOS Legend

| | | | | | |
|------------|----------|----------|----------|-----------|----------|
| <u>A</u> | <u>B</u> | <u>C</u> | <u>D</u> | <u>E</u> | <u>F</u> |
| Very Light | Light | Moderate | Heavy | Congested | Severe |

SR 362 (Spalding County) - Evening



Arterial LOS Legend

| | | | | | |
|------------|----------|----------|----------|-----------|----------|
| <u>A</u> | <u>B</u> | <u>C</u> | <u>D</u> | <u>E</u> | <u>F</u> |
| Very Light | Light | Moderate | Heavy | Congested | Severe |

SR 365/US 23 (Hall County) - Morning

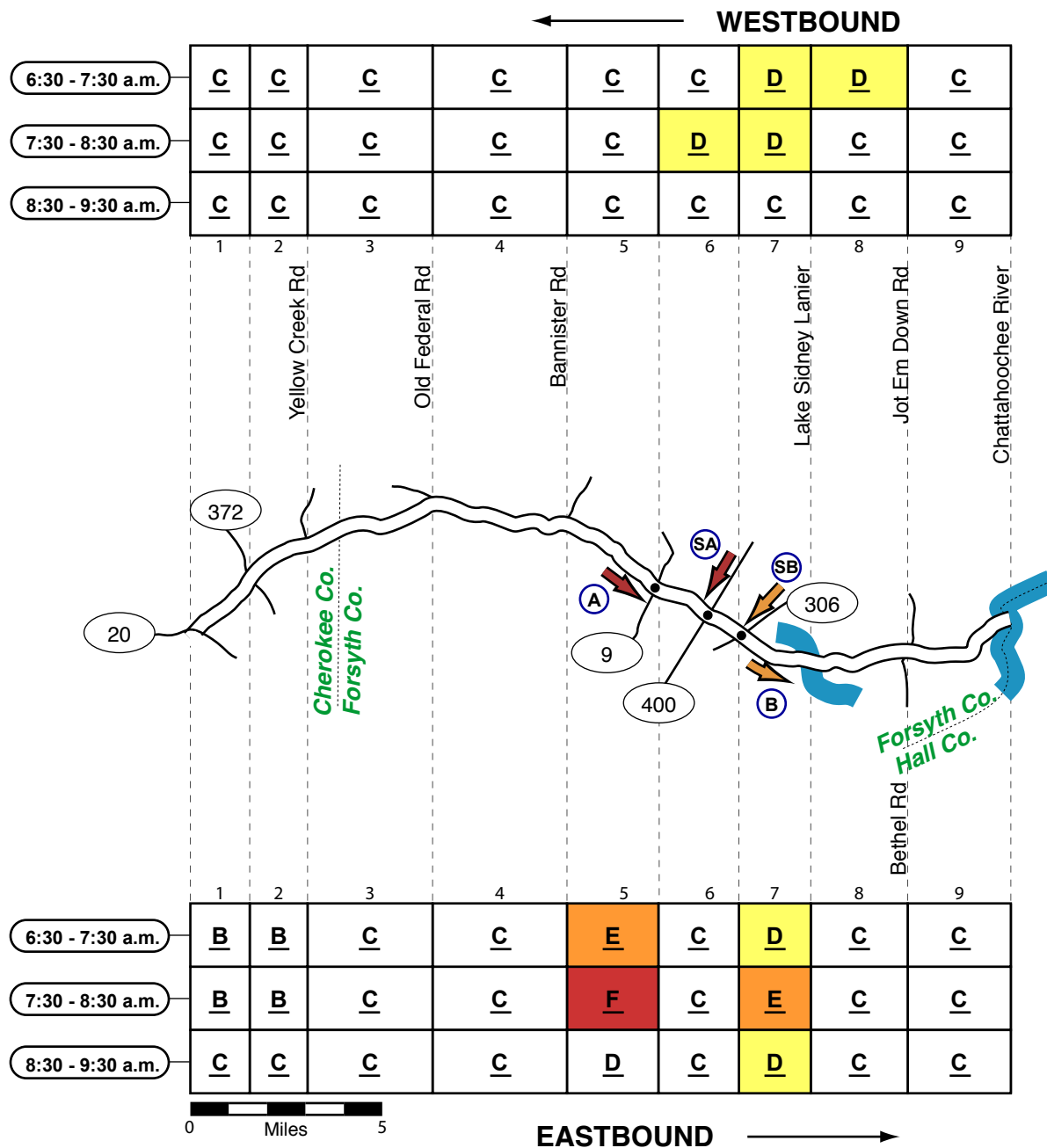


Arterial LOS Legend

| | | | | | |
|------------|----------|----------|----------|-----------|----------|
| A | B | C | D | E | F |
| Very Light | Light | Moderate | Heavy | Congested | Severe |

| | | | | | |
|------------|----------|----------|----------|-----------|----------|
| <u>A</u> | <u>B</u> | <u>C</u> | <u>D</u> | <u>E</u> | <u>F</u> |
| Very Light | Light | Moderate | Heavy | Congested | Severe |

SR 369 (Cherokee/Forsyth & Hall Counties) - Morning



Arterial LOS Legend

| | | | | | |
|------------|----------|----------|----------|-----------|----------|
| <u>A</u> | <u>B</u> | <u>C</u> | <u>D</u> | <u>E</u> | <u>F</u> |
| Very Light | Light | Moderate | Heavy | Congested | Severe |

SR 369 (Cherokee/Forsyth & Hall Counties) - Morning**A**

Congestion Type: Mainline Signal Queue

Location: SR 9

Frequency: Peak Hour

Direction: Eastbound

Queue Population: 45 to 75 vpl

Number of Lanes: 1

B

Congestion Type: Platoons

Location: Between SR 306 & Lake Sidney Lanier

Frequency: Intermittent

Direction: Eastbound

Platoon Population: 25 to 30 vpl

Number of Lanes: 1

SA

Congestion Type: Surveyed Cross Road Signal Queue

Location: SR 400

Frequency: Most Observations

Direction: Southbound

Queue Population: 20 to 30 vpl

Number of Lanes: 2

SB

Congestion Type: Surveyed Cross Road Signal Queue

Location: SR 306

Frequency: Intermittent

Direction: Westbound

Queue Population: 25 to 35 vpl

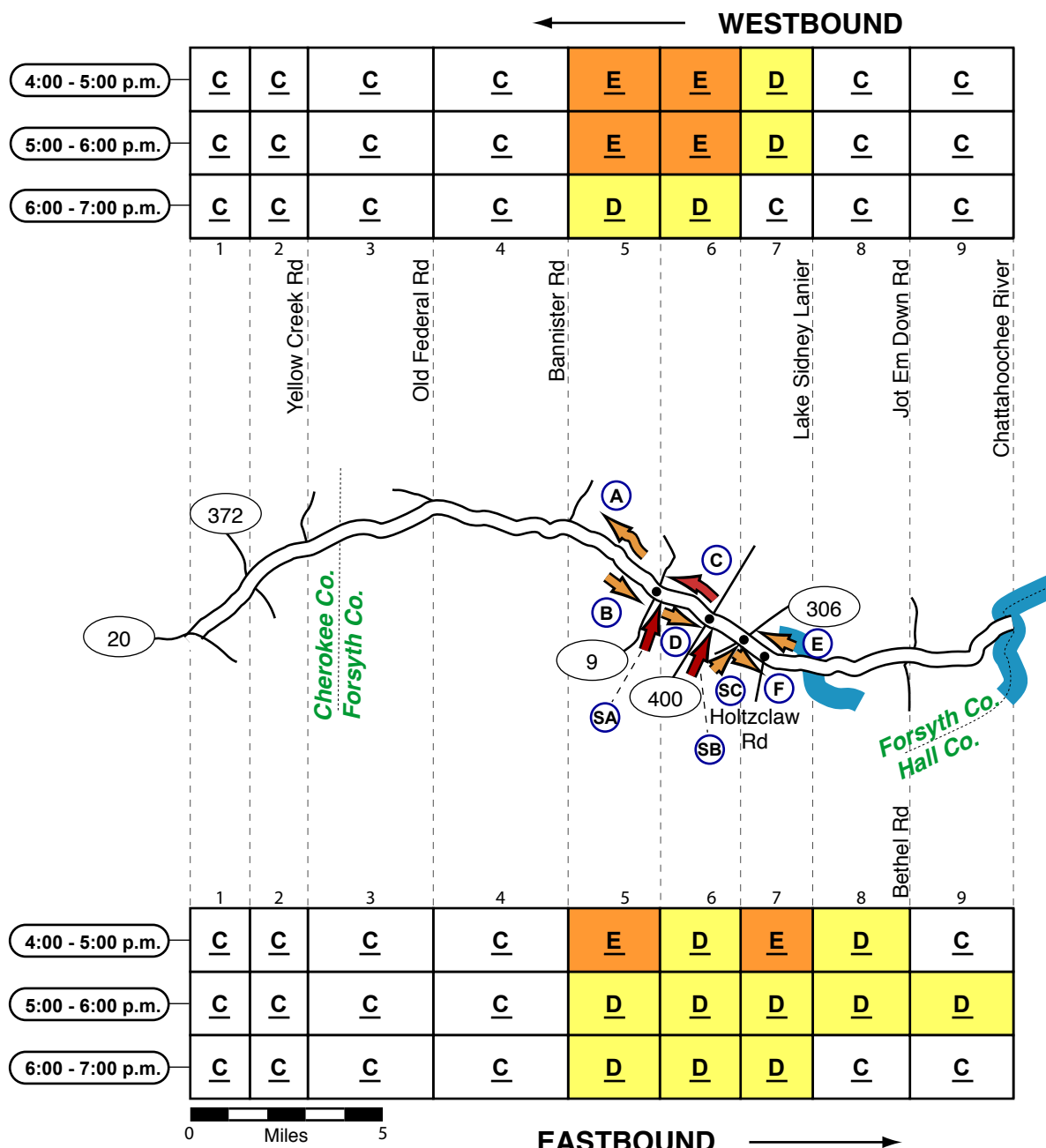
Number of Lanes: 1

Arterial LOS Legend

| <u>A</u> | <u>B</u> | <u>C</u> | <u>D</u> | <u>E</u> | <u>F</u> |
|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|
| Very Light | Light | Moderate | Heavy | Congested | Severe |

Spring 2010

SR 369 (Cherokee/Forsyth & Hall Counties) - Evening



Arterial LOS Legend

| | | | | | |
|------------|----------|----------|----------|-----------|----------|
| <u>A</u> | <u>B</u> | <u>C</u> | <u>D</u> | <u>E</u> | <u>F</u> |
| Very Light | Light | Moderate | Heavy | Congested | Severe |

SR 369 (Cherokee/Forsyth & Hall Counties) - Evening

A

Congestion Type: Platoons
 Location: Between SR 9 & Bannister Rd
 Frequency: One time only
 Direction: Westbound
 Platoon Population: 25 to 30 vpl
 Number of Lanes: 1

B

Congestion Type: Mainline Signal Queue
 Location: SR 9
 Frequency: Intermittent
 Direction: Eastbound
 Queue Population: 20 to 30 vpl
 Number of Lanes: 1
 Note: During one observation, the queue contained approximately 50 vehicles

C

Congestion Type: Mainline Signal Queue
 Location: SR 9
 Frequency: Peak Hour
 Direction: Westbound
 Queue Population: 30 to 50 vpl
 Number of Lanes: 1

D

Congestion Type: Mainline Signal Queue
 Location: SR 400
 Frequency: One time only
 Direction: Eastbound
 Queue Population: 35 to 40 vpl
 Number of Lanes: 1

E

Congestion Type: Left-Turn Queue
 Location: SR 306
 Frequency: Intermittent
 Direction: Westbound
 Queue Population: 20 to 30 vpl
 Number of Lanes: 1

F

Congestion Type: Mainline Signal Queue
 Location: Holtzclaw Rd
 Frequency: Intermittent
 Direction: Eastbound
 Queue Population: 35 to 45 vpl
 Number of Lanes: 1

SA

Congestion Type: Surveyed Cross Road Signal Queue
 Location: SR 9
 Frequency: Peak Hour
 Direction: Northbound
 Queue Population: 20 to 40 vpl
 Number of Lanes: 1

SB

Congestion Type: Surveyed Cross Road Signal Queue
 Location: SR 400
 Frequency: Intermittent
 Direction: Northbound
 Queue Population: 20 to 40 vpl
 Number of Lanes: 2

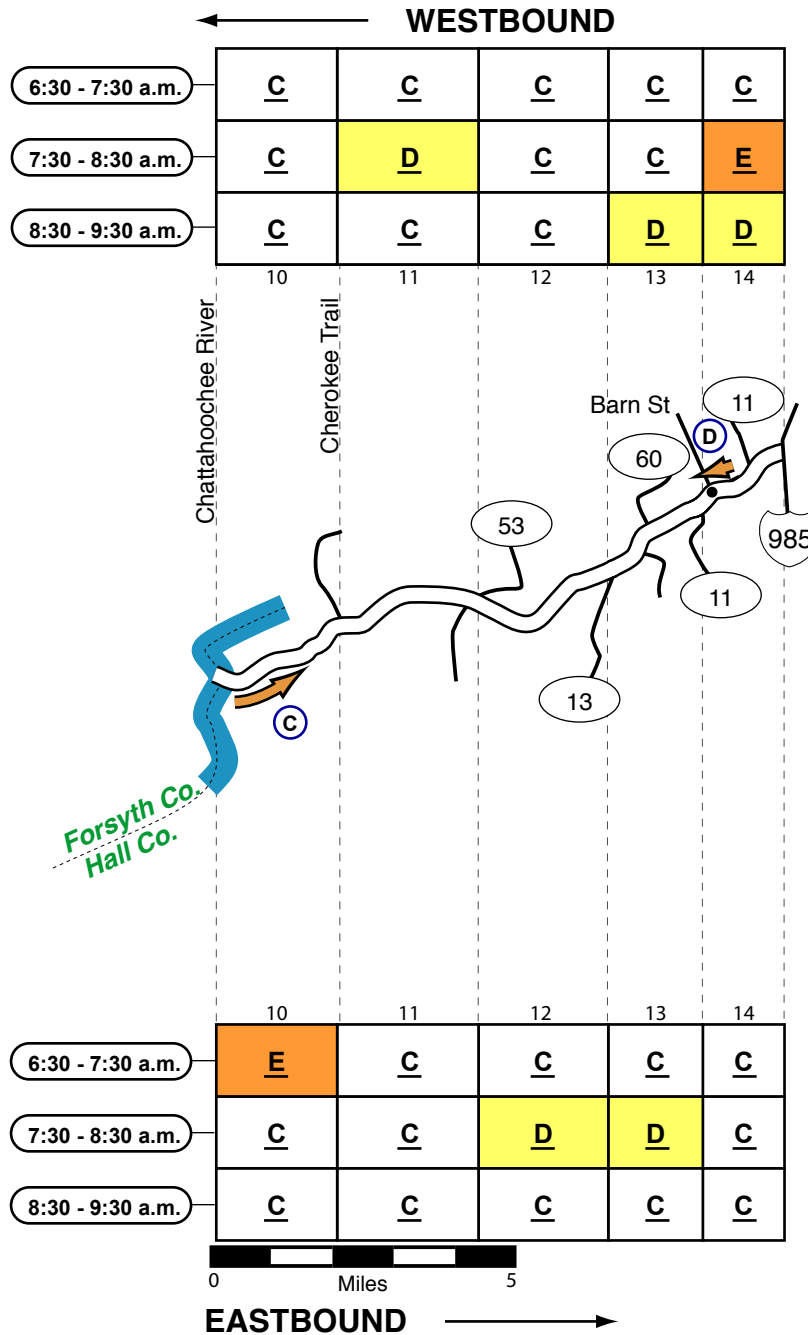
SC

Congestion Type: Surveyed Cross Road Signal Queue
 Location: SR 306
 Frequency: Intermittent
 Direction: Eastbound
 Queue Population: 20 to 30 vpl
 Number of Lanes: 1

Arterial LOS Legend

| A | B | C | D | E | F |
|------------|-------|----------|-------|-----------|--------|
| Very Light | Light | Moderate | Heavy | Congested | Severe |

SR 369 (Cherokee/Forsyth & Hall Counties) - Morning



C

Congestion Type: Platoons

Location: Between the Chattahoochee River & Cherokee Trail

Frequency: Intermittent

Direction: Eastbound

Platoon Population: 25 to 35 vpl

Number of Lanes: 1

D

Congestion Type: Mainline Signal Queue

Location: Barn St

Frequency: Intermittent

Direction: Westbound

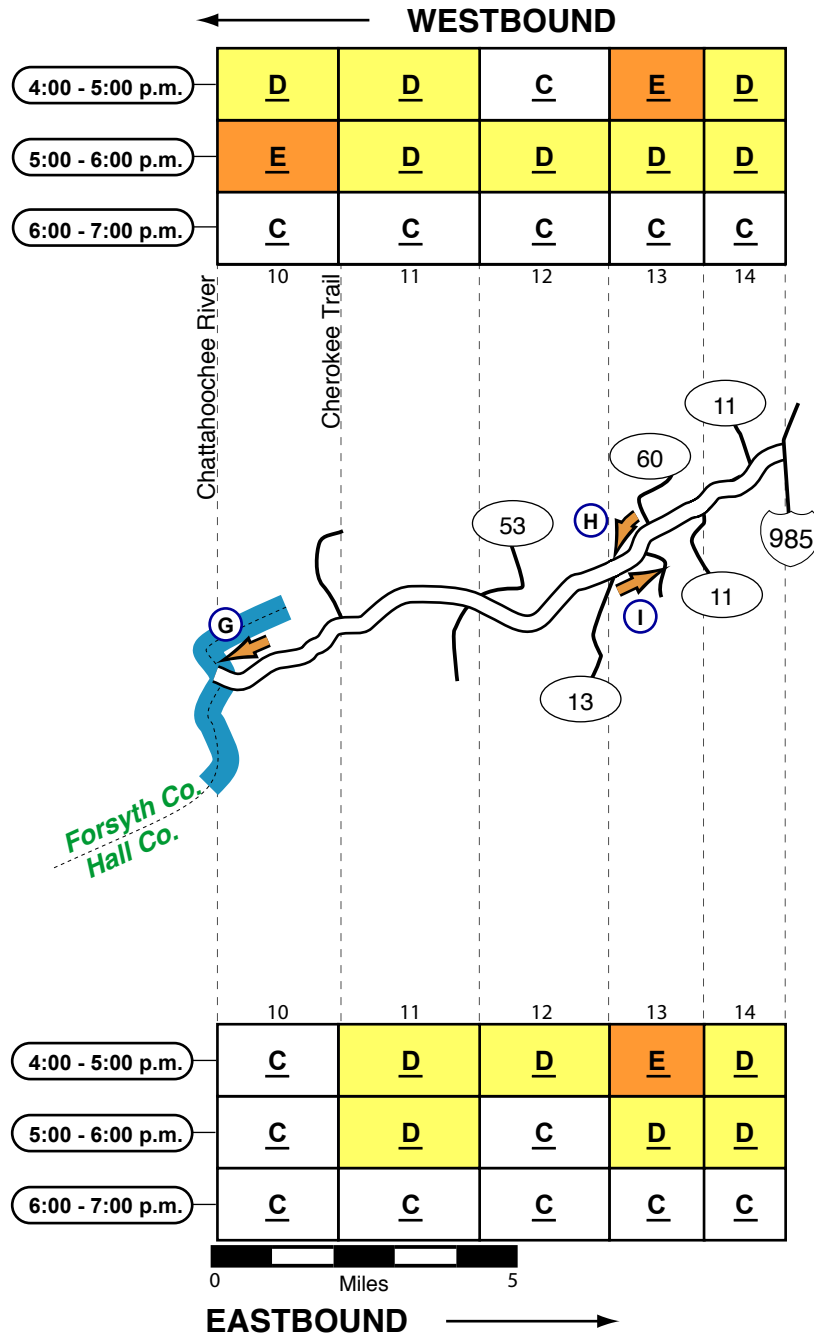
Queue Population: 20 to 30 vpl

Number of Lanes: 2

Arterial LOS Legend

| A | B | C | D | E | F |
|------------|-------|----------|-------|-----------|--------|
| Very Light | Light | Moderate | Heavy | Congested | Severe |

SR 369 (Cherokee/Forsyth & Hall Counties) - Evening

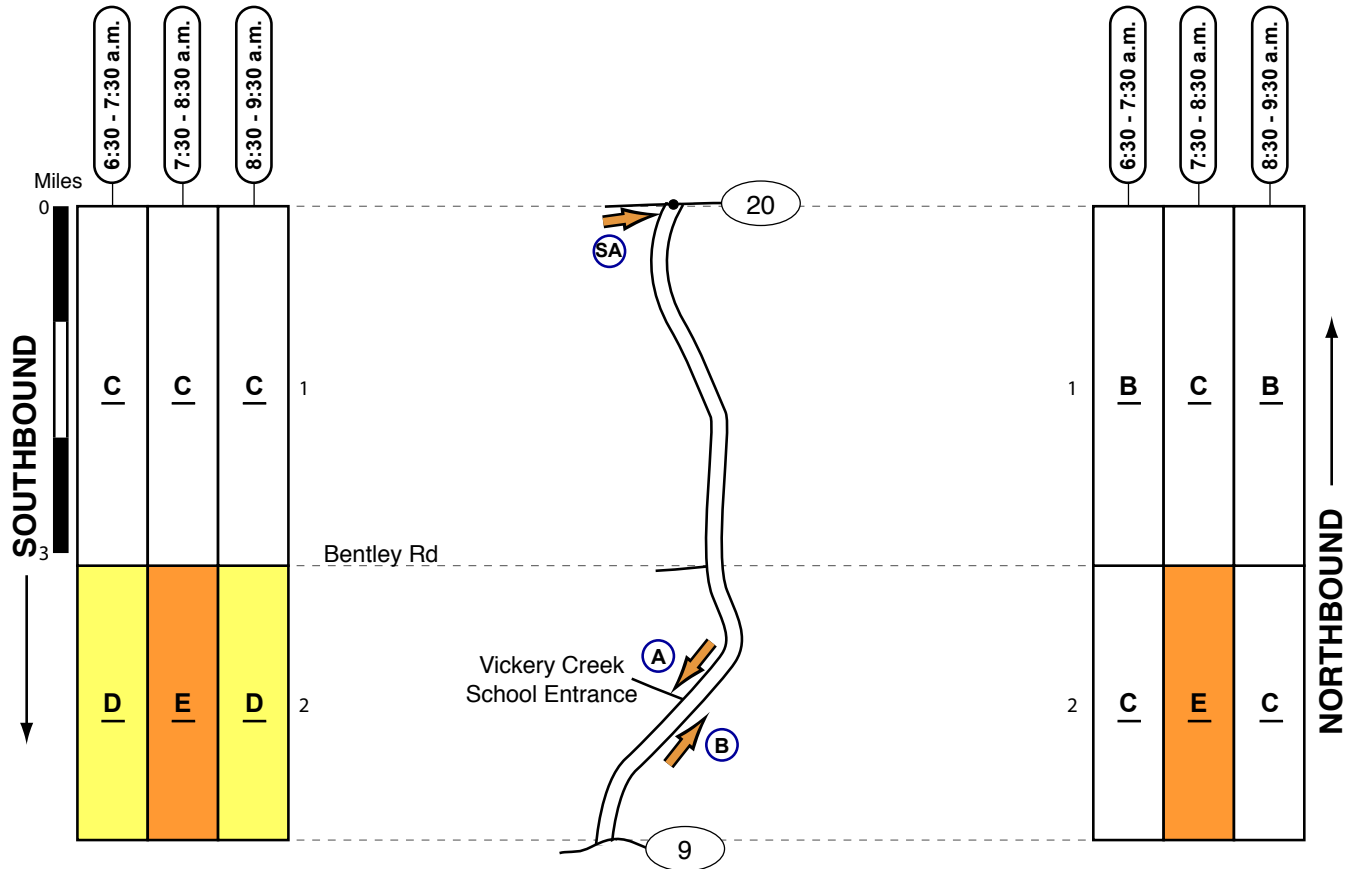


G
 Congestion Type: Platoons
 Location: Between Cherokee Trail & the Chatahoochee River
 Frequency: Intermittent
 Direction: Westbound
 Platoon Population: 25 to 35 vpl
 Number of Lanes: 1

I
 Congestion Type: Platoons
 Location: Between SR 13 & SR 11
 Frequency: Intermittent
 Direction: Eastbound
 Platoon Population: 25 to 35 vpl
 Number of Lanes: 2

H
 Congestion Type: Platoons
 Location: Between SR 11 & SR 13
 Frequency: Intermittent
 Direction: Westbound
 Platoon Population: 25 to 30 vpl
 Number of Lanes: 2

SR 371 (Forsyth County) - Morning



A
 Congestion Type: Mainline Queue (School Entrance)
 Location: Vickery Creek School Entrance
 Frequency: Intermittent
 Direction: Southbound
 Queue Population: 20 to 60 vpl
 Number of Lanes: 1
 Note: Vehicles waiting to turn right into the school entrance backed into the mainline on SR 371.

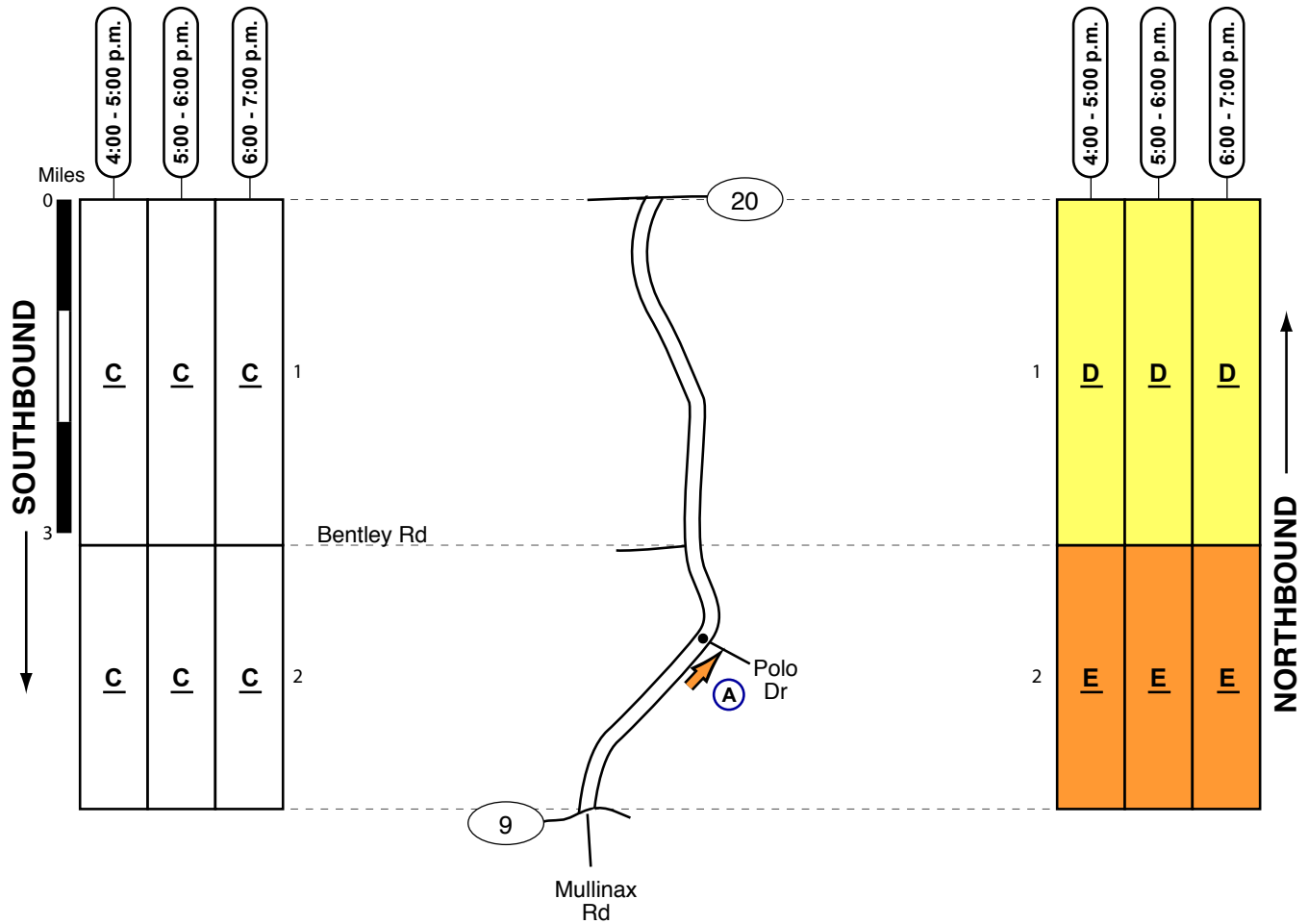
SA
 Congestion Type: Surveyed Cross Road Signal Queue
 Location: SR 20
 Frequency: Intermittent
 Direction: Eastbound
 Queue Population: 20 to 30 vpl
 Number of Lanes: 1

B
 Congestion Type: Mainline Queue (School Entrance)
 Location: Vickery Creek School Entrance
 Frequency: Intermittent
 Direction: Northbound
 Queue Population: 20 to 30 vpl
 Number of Lanes: 1
 Note: Vehicles waiting to turn left into the school entrance backed into the mainline on SR 371.

Arterial LOS Legend

| A | B | C | D | E | F |
|------------|-------|----------|-------|-----------|--------|
| Very Light | Light | Moderate | Heavy | Congested | Severe |

SR 371 (Forsyth County) - Evening

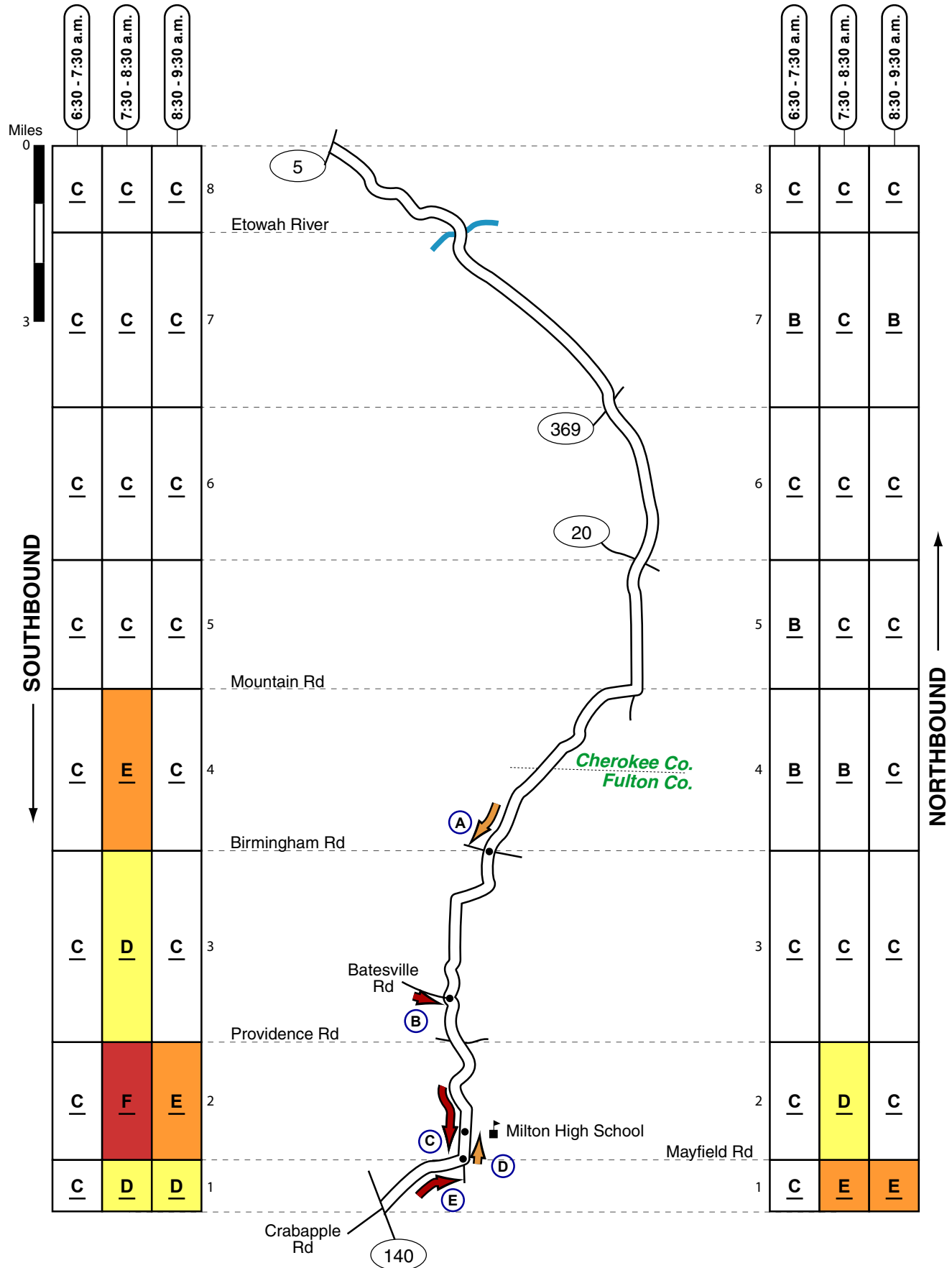


A
 Congestion Type: Mainline Signal Queue
 Location: Polo Dr
 Frequency: Intermittent
 Direction: Northbound
 Queue Population: 20 to 60 vpl
 Number of Lanes: 1

Arterial LOS Legend

| A | B | C | D | E | F |
|------------|-------|----------|-------|-----------|--------|
| Very Light | Light | Moderate | Heavy | Congested | Severe |

SR 372 (Cherokee & Fulton Counties) - Morning



SR 372 (Cherokee & Fulton Counties) - Morning

A

Congestion Type: Mainline Signal Queue
Location: Birmingham Rd
Frequency: Intermittent
Direction: Southbound
Queue Population: 20 to 30 vpl
Number of Lanes: 1

B

Congestion Type: Cross Road Signal Queue
Location: Batesville Rd
Frequency: Peak Hour
Direction: Eastbound
Queue Population: 20 to 40 vpl
Number of Lanes: 1

C

Congestion Type: Mainline Signal Queue
Location: Broadwell Rd
Frequency: Most Observations
Direction: Southbound
Queue Population: 20 to 80 vpl
Number of Lanes: 1
Note: During some observations, congestion extended back through the upstream signal at Milton High School.

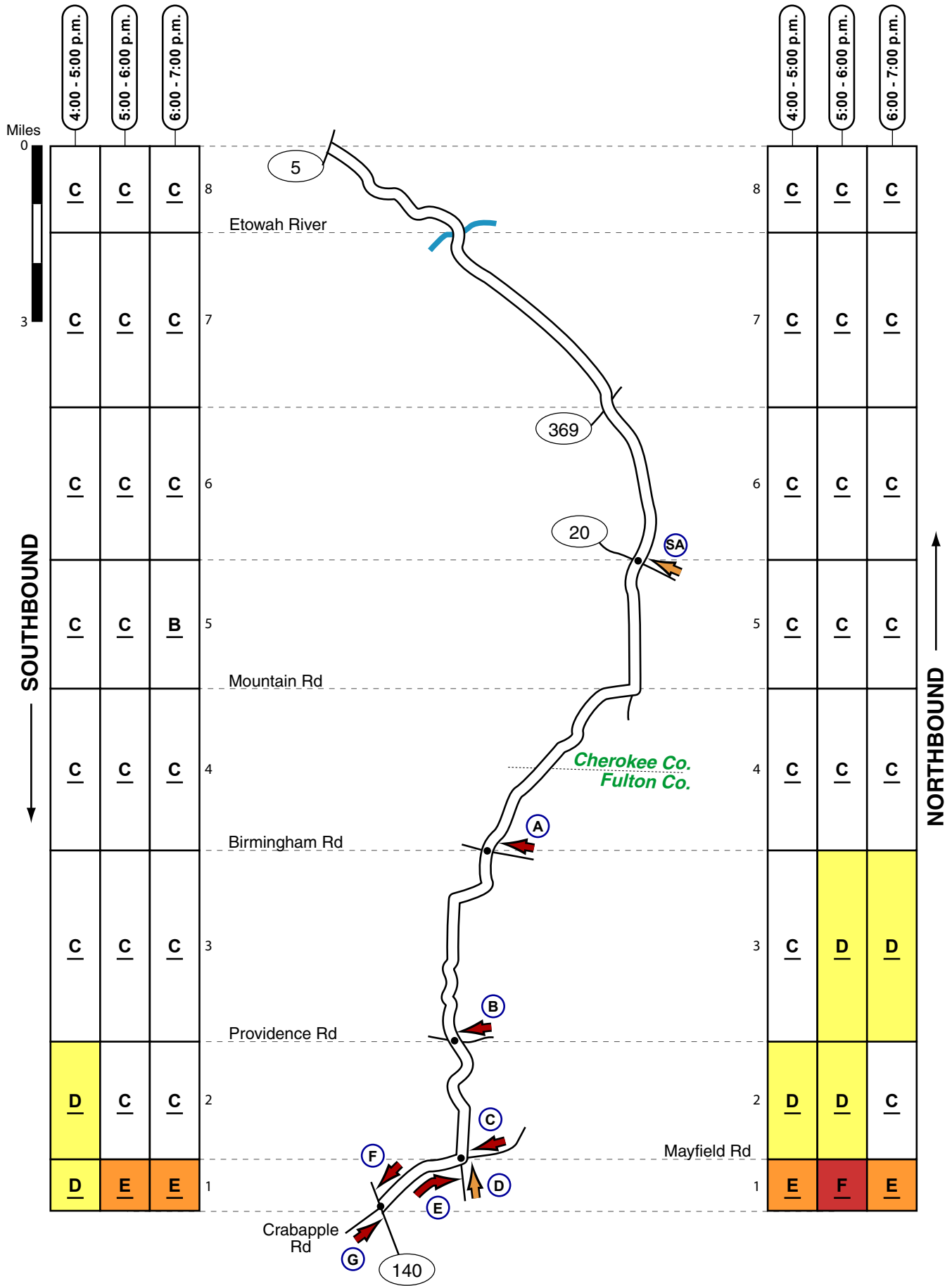
D

Congestion Type: Mainline Queue
Location: Milton High School
Frequency: Intermittent
Direction: Northbound
Queue Population: 20 to 30 vpl
Number of Lanes: 1
Note: When congested, vehicles were queued in the dedicated right lane at the signal (entrance to the high school).

E

Congestion Type: Mainline Signal Queue
Location: Broadwell Rd
Frequency: Most Observations
Direction: Northbound
Queue Population: 20 to 40 vpl
Number of Lanes: 1

SR 372 (Cherokee & Fulton Counties) - Evening



SR 372 (Cherokee & Fulton Counties) - Evening

A

Congestion Type: Cross Road Signal Queue
Location: Birmingham Rd
Frequency: Peak Hour
Direction: Westbound
Queue Population: 20 to 40 vpl
Number of Lanes: 1

B

Congestion Type: Cross Road Signal Queue
Location: Providence Rd
Frequency: Intermittent
Direction: Westbound
Queue Population: 20 to 35 vpl
Number of Lanes: 1

C

Congestion Type: Cross Road Signal Queue
Location: Mayfield Rd
Frequency: Most Observations
Direction: Westbound
Queue Population: 20 to 50 vpl
Number of Lanes: 1

D

Congestion Type: Cross Road Signal Queue
Location: Broadwell Rd
Frequency: Intermittent
Direction: Northbound
Queue Population: 20 to 30 vpl
Number of Lanes: 1

E

Congestion Type: Mainline Signal Queue
Location: Broadwell Rd
Frequency: Most Observations
Direction: Northbound
Queue Population: 20 to 50 vpl
Number of Lanes: 1

F

Congestion Type: Mainline Signal Queue
Location: SR 140
Frequency: Most Observations
Direction: Southbound
Queue Population: 20 to 40 vpl
Number of Lanes: 1

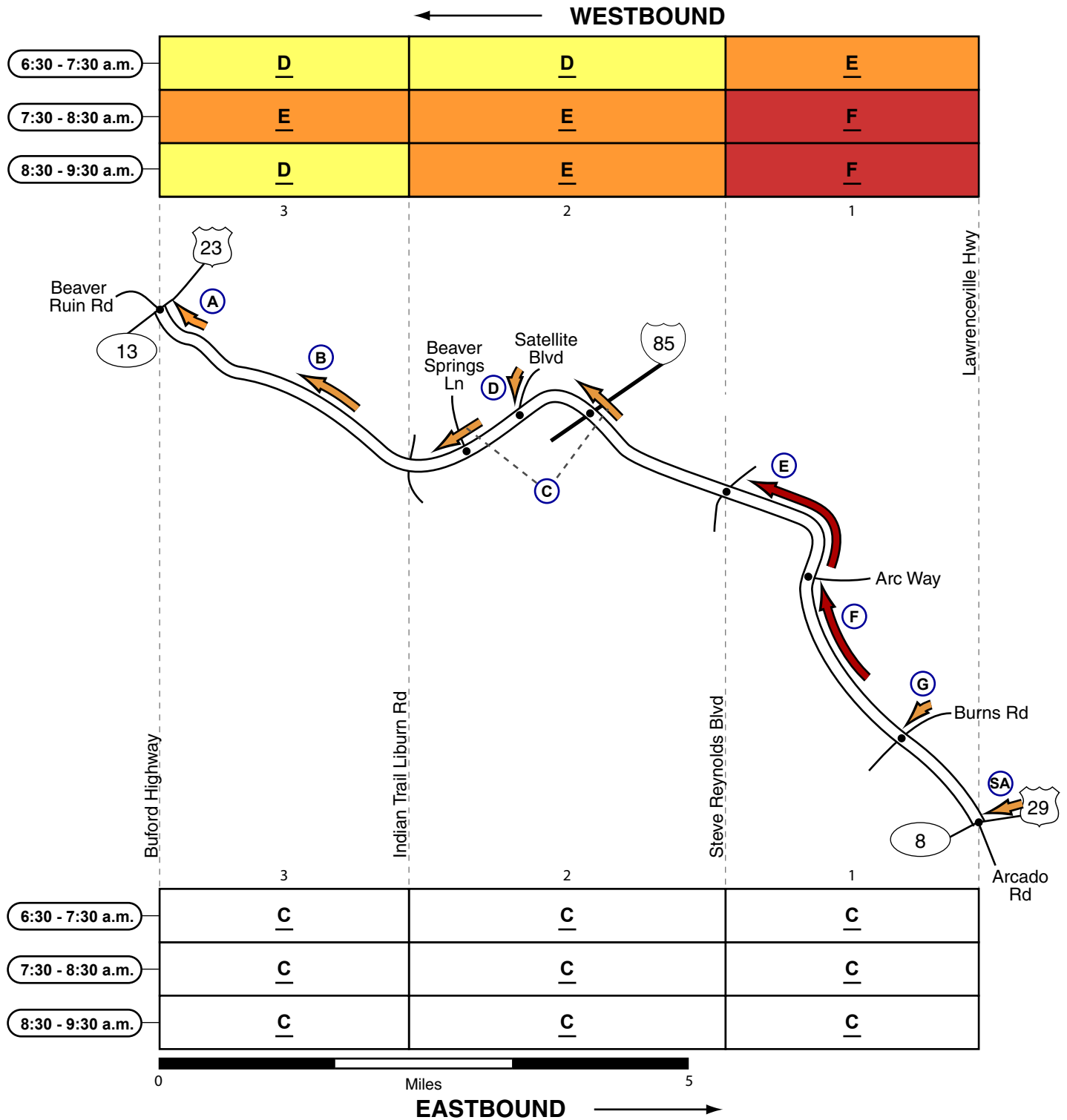
G

Congestion Type: Cross Road Signal Queue
Location: Crabapple Rd
Frequency: Most Observations
Direction: Northbound
Queue Population: 20 to 60 vpl
Number of Lanes: 1

SA

Congestion Type: Surveyed Cross Road Signal Queue
Location: SR 20
Frequency: Intermittent
Direction: Westbound
Queue Population: 20 to 25 vpl
Number of Lanes: 1

SR 378 (Gwinnett County) - Morning



SR 378 (Gwinnett County) - Morning

A

Congestion Type: Mainline Signal Queue
Location: SR 13
Frequency: Intermittent
Direction: Westbound
Queue Population: 20 to 30 vpl
Number of Lanes: 2

SA

Congestion Type: Surveyed Cross Road Signal Queue
Location: SR 8
Frequency: Intermittent
Direction: Westbound
Queue Population: 20 to 25 vpl
Number of Lanes: 2

B

Congestion Type: Platoons
Location: Between Indian Trail Liburn Rd & SR 13
Frequency: Intermittent
Direction: Westbound
Platoon Population: 25 to 35 vpl
Number of Lanes: 2

C

Congestion Type: Platoons
Location: Between Steve Reynolds Blvd & Indian Trail Liburn Rd
Frequency: Intermittent
Direction: Westbound
Platoon Population: 25 to 35 vpl
Number of Lanes: 3

D

Congestion Type: Cross Road Signal Queue
Location: Satellite Blvd
Frequency: Intermittent
Direction: Southbound
Population: 20 to 30 vpl
Number of Lanes: 1
Note: Congestion was typically limited to the right-turn lane.

E

Congestion Type: Mainline Signal Queue
Location: Steve Reynolds Blvd
Frequency: Most Observations
Direction: Westbound
Queue Population: 40 to 70 vpl
Number of Lanes: 2

F

Congestion Type: Mainline Signal Queue
Location: Arc Way
Frequency: Most observations after 7:30 a.m.
Direction: Westbound
Queue Population: 50 to 80 vpl
Number of Lanes: 2

G

Congestion Type: Cross Road Signal Queue
Location: Burns Rd
Frequency: Intermittent
Direction: Westbound
Queue Population: 20 to 25 vpl
Number of Lanes: 1



| | | | | | |
|------------|----------|----------|----------|-----------|----------|
| <u>A</u> | <u>B</u> | <u>C</u> | <u>D</u> | <u>E</u> | <u>F</u> |
| Very Light | Light | Moderate | Heavy | Congested | Severe |

SR 378 (Gwinnett County) - Evening

A

Congestion Type: Mainline Signal Queue
Location: Pinnacle Way
Frequency: Intermittent
Direction: Eastbound
Queue Population: 35 to 45 vpl
Number of Lanes: 2

B

Congestion Type: Mainline Signal Queue
Location: Indian Trail Liburn Rd
Frequency: Intermittent
Direction: Eastbound
Queue Population: 20 to 30 vpl
Number of Lanes: 2

C

Congestion Type: Mainline Signal Queue
Location: I-85
Frequency: Intermittent
Direction: Eastbound
Queue Population: 20 to 30 vpl
Number of Lanes: 2
Note: During some observations, congestion was found in the dedicated left-turn lane.

D

Congestion Type: Mainline Signal Queue
Location: Steve Reynolds Blvd
Frequency: Most observations after 5:00 p.m.
Direction: Eastbound
Queue Population: 25 to 50 vpl
Number of Lanes: 2

E

Congestion Type: Platoons
Location: Between Steve Reynolds Blvd & SR 8
Frequency: Intermittent
Direction: Eastbound
Platoon Population: 30 to 40 vpl
Number of Lanes: 2

F

Congestion Type: Mainline Signal Queue
Location: Burns Rd
Frequency: Intermittent
Direction: Eastbound
Queue Population: 20 to 25 vpl
Number of Lanes: 2

G

Congestion Type: Left-Turn Queue
Location: SR 8
Frequency: Intermittent
Direction: Eastbound
Queue Population: 20 to 25 vpl
Number of Lanes: 1

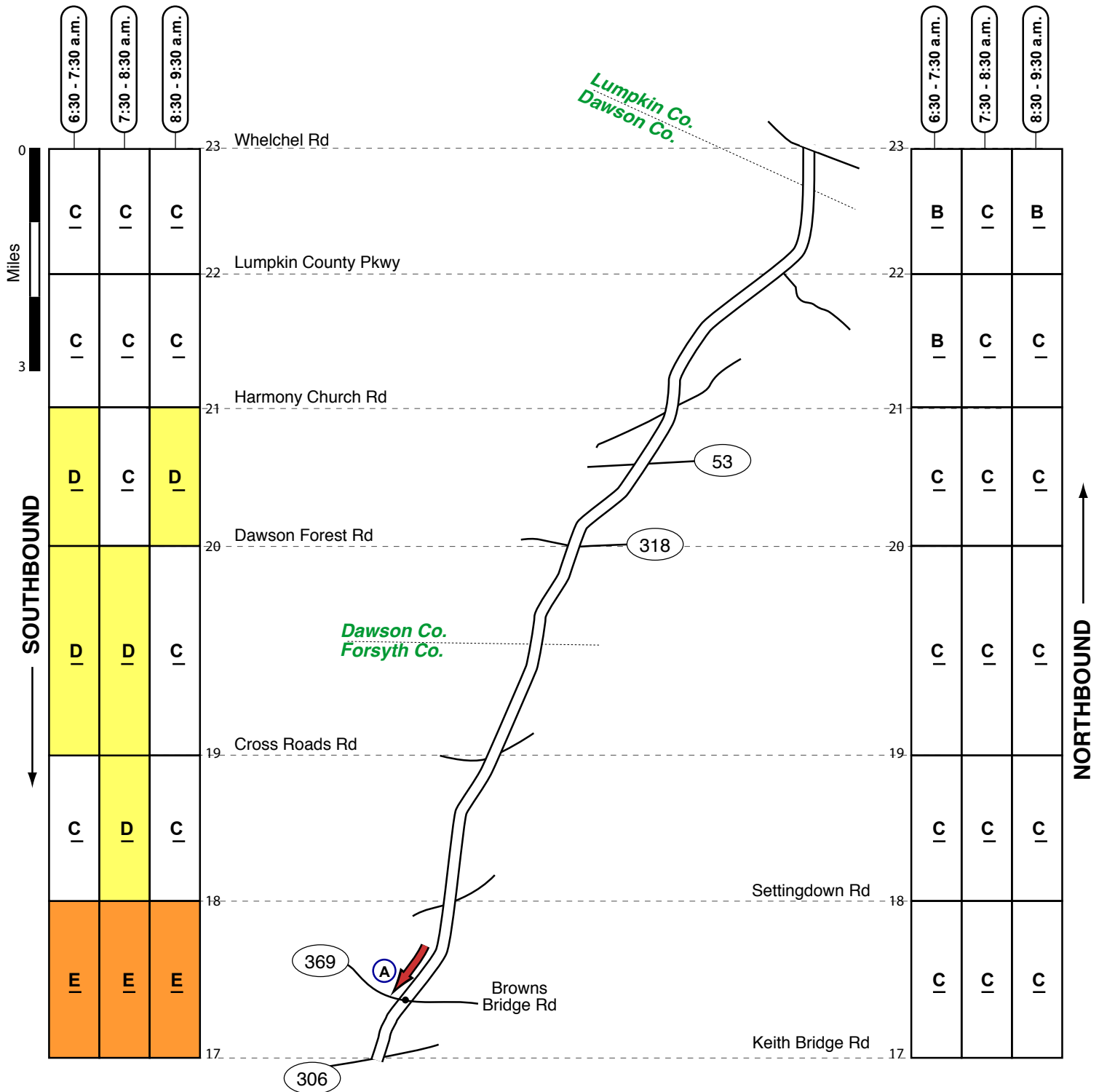
SA

Congestion Type: Left-Turn Queue
Location: SR 13
Frequency: Intermittent
Direction: Southbound
Queue Population: 20 to 45 vpl
Number of Lanes: 2
Note: Intermittently, congestion in the left-turn bay extended back into the right lane on SR 13.

SB

Congestion Type: Surveyed Cross Road Signal Queue/Platoons
Location: SR 8
Frequency: Intermittent
Direction: Eastbound
Queue Population: 30 to 40 vpl
Number of Lanes: 2

SR 400 (Forsyth/Dawson & Lumpkin Counties) - Morning



Arterial LOS Legend

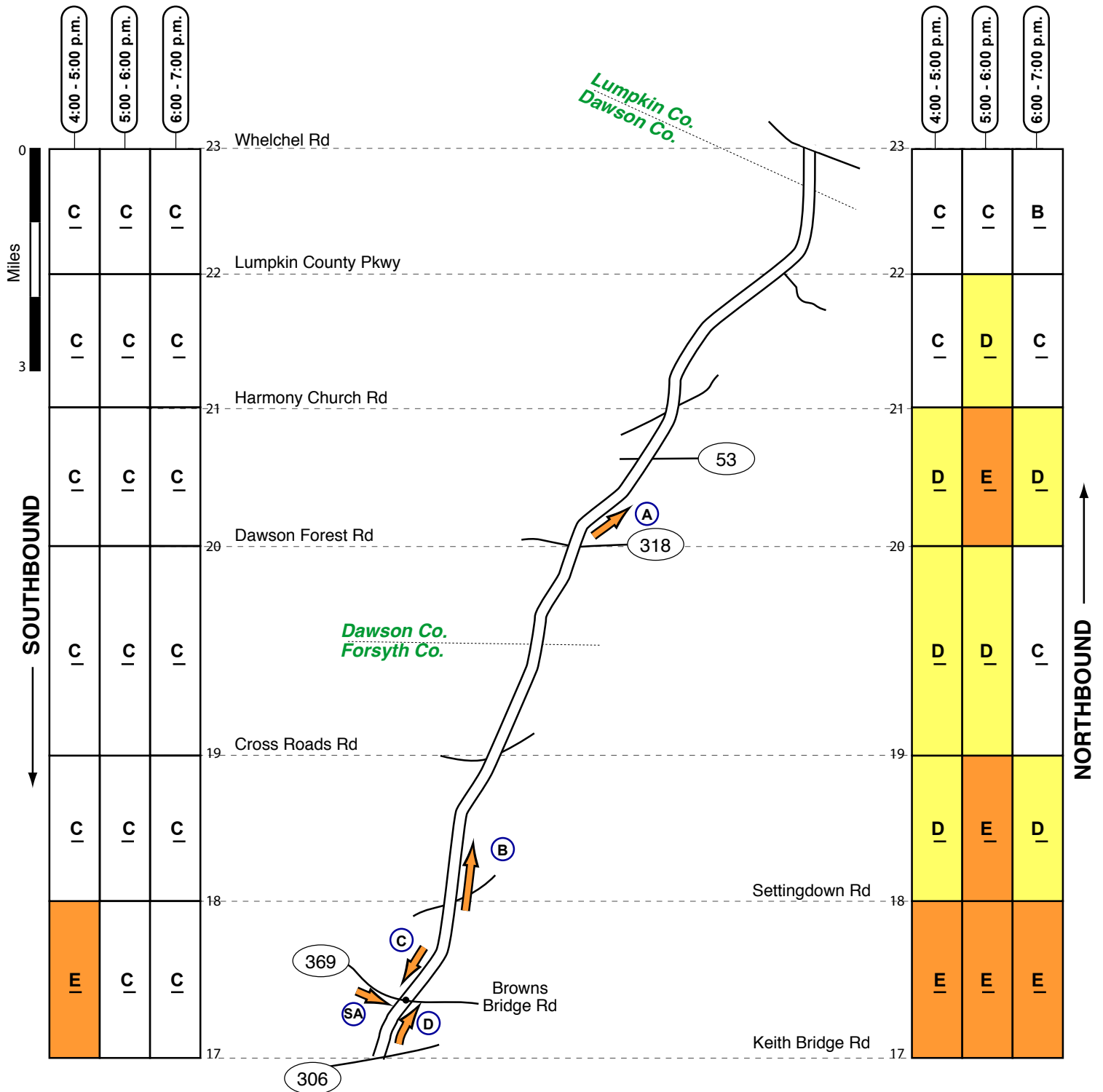
| | | | | | |
|------------|----------|----------|----------|-----------|----------|
| A | B | C | D | E | F |
| Very Light | Light | Moderate | Heavy | Congested | Severe |

SR 400 (Forsyth/Dawson & Lumpkin Counties) - Morning

A
Congestion Type: Mainline Signal Queue
Location: SR 369 (Browns Bridge Rd)
Frequency: Most Observations
Direction: Southbound
Queue Population: 20 to 30 vpl
Number of Lanes: 2

| | | | | | | |
|---------------------|------------|----------|----------|----------|-----------|----------|
| Arterial LOS Legend | <u>A</u> | <u>B</u> | <u>C</u> | <u>D</u> | <u>E</u> | <u>F</u> |
| | Very Light | Light | Moderate | Heavy | Congested | Severe |

SR 400 (Forsyth/Dawson & Lumpkin Counties) - Evening



SR 400 (Forsyth/Dawson & Lumpkin Counties) - Evening

A

Congestion Type: Platoons

Location: Between SR 318 & Harmony Church Rd

Frequency: Intermittent

Direction: Northbound

Queue Population: 25 to 40 vpl

Number of Lanes: 2

B

Congestion Type: Platoons

Location: Between Settingdown Rd & Cross Roads Rd

Frequency: Peak Hour

Direction: Northbound

Queue Population: 25 to 45 vpl

Number of Lanes: 2

C

Congestion Type: Platoons

Location: Approaching SR 369

Frequency: Intermittent

Direction: Southbound

Platoon Population: 25 to 35 vpl

Number of Lanes: 2

D

Congestion Type: Mainline Signal Queue

Location: SR 369 (Browns Bridge Rd)

Frequency: Intermittent

Direction: Northbound

Queue Population: 20 to 40 vpl

Number of Lanes: 2

SA

Congestion Type: Surveyed Cross Road Signal Queue

Location: SR 369

Frequency: One time only

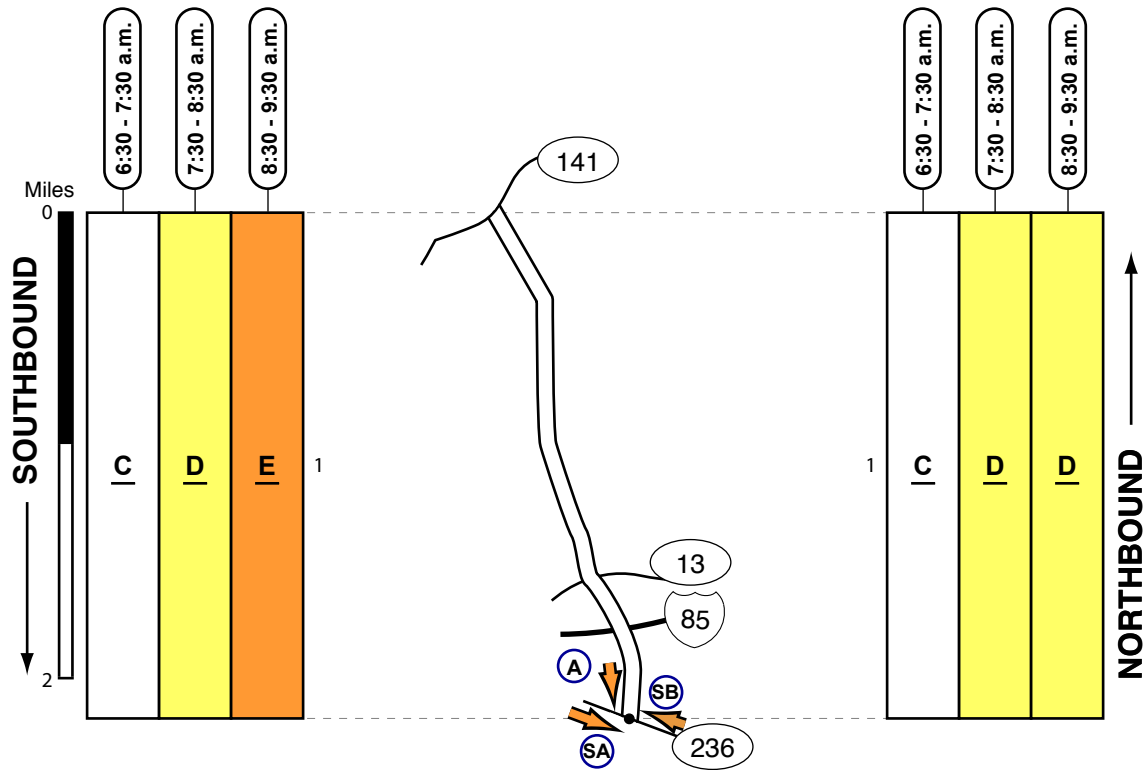
Direction: Eastbound

Queue Population: 35 to 40 vpl

Number of Lanes: 1

Arterial LOS Legend

| <u>A</u> | <u>B</u> | <u>C</u> | <u>D</u> | <u>E</u> | <u>F</u> |
|------------|----------|----------|----------|-----------|----------|
| Very Light | Light | Moderate | Heavy | Congested | Severe |

SR 884 - Lenox Road (Fulton County) - Morning**A**

Congestion Type: Mainline Signal Queue

Location: SR 236

Frequency: Intermittent

Direction: Southbound

Queue Population: 20 to 25 vpl

Number of Lanes: 2

SA

Congestion Type: Surveyed Cross Road Signal Queue

Location: SR 236

Frequency: Intermittent

Direction: Eastbound

Queue Population: 35 to 45 vpl

Number of Lanes: 1

SB

Congestion Type: Surveyed Cross Road Signal Queue

Location: SR 236

Frequency: Intermittent

Direction: Westbound

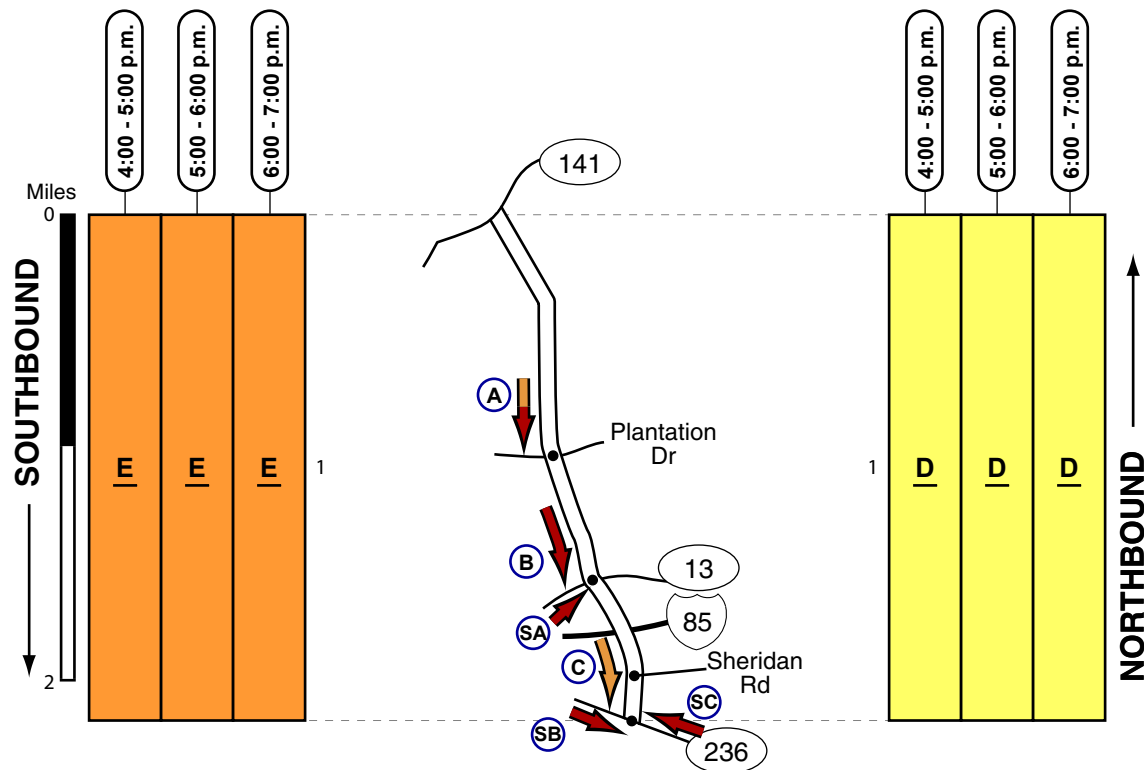
Queue Population: 25 to 45 vpl

Number of Lanes: 1

Arterial LOS Legend

| A | B | C | D | E | F |
|------------|----------|----------|----------|-----------|----------|
| Very Light | Light | Moderate | Heavy | Congested | Severe |

SR 884 - Lenox Road (Fulton County) - Evening



A
 Congestion Type: Mainline Signal Queue
 Location: Plantation Dr
 Frequency: Peak Hour
 Direction: Southbound
 Queue Population: 20 to 40 vpl
 Number of Lanes: 1

B
 Congestion Type: Mainline Signal Queue
 Location: SR 13
 Frequency: Most Observations
 Direction: Southbound
 Queue Population: 20 to 50 vpl
 Number of Lanes: 2

C
 Congestion Type: Mainline Signal Queue
 Location: SR 236 & Sheridan Rd
 Frequency: Intermittent
 Direction: Southbound
 Queue Population: 20 to 40 vpl
 Number of Lanes: 2
 Note: When congested, the head of the queue was found intermittently at the signals at Sheridan Rd and SR 236.

SA
 Congestion Type: Surveyed Cross Road Signal Queue
 Location: SR 13
 Frequency: Most observations after 5:40 p.m.
 Direction: Northbound
 Queue Population: 20 to 45 vpl
 Number of Lanes: 1
 Note: Left-turn queue

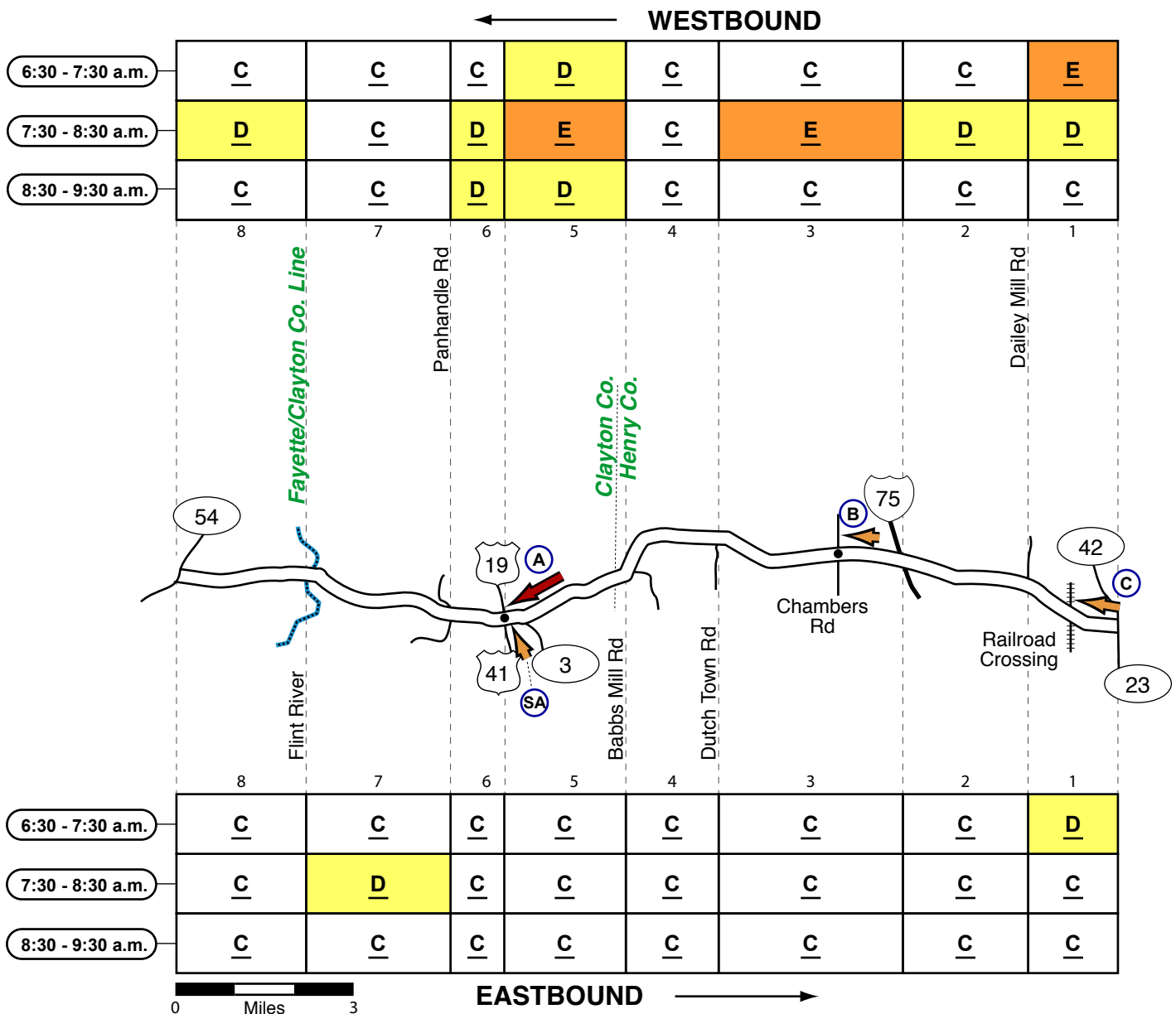
SB
 Congestion Type: Surveyed Cross Road Signal Queue
 Location: SR 236
 Frequency: Most Observations
 Direction: Eastbound
 Queue Population: 40 to 70 vpl
 Number of Lanes: 1

SC
 Congestion Type: Surveyed Cross Road Signal Queue
 Location: SR 236
 Frequency: Most Observations
 Direction: Westbound
 Queue Population: 35 to 75 vpl
 Number of Lanes: 1

Arterial LOS Legend

| A | B | C | D | E | F |
|------------|-------|----------|-------|-----------|--------|
| Very Light | Light | Moderate | Heavy | Congested | Severe |

SR 920 (Fayette/Clayton & Henry Counties) - Morning



A
Congestion Type: Mainline Signal Queue
Location: US 19/41
Frequency: Peak Hour
Direction: Westbound
Queue Population: 20 to 40 vpl
Number of Lanes: 1

B
Congestion Type: Mainline Signal Queue
Location: Chambers Rd
Frequency: Intermittent
Direction: Westbound
Queue Population: 20 to 40 vpl
Number of Lanes: 1

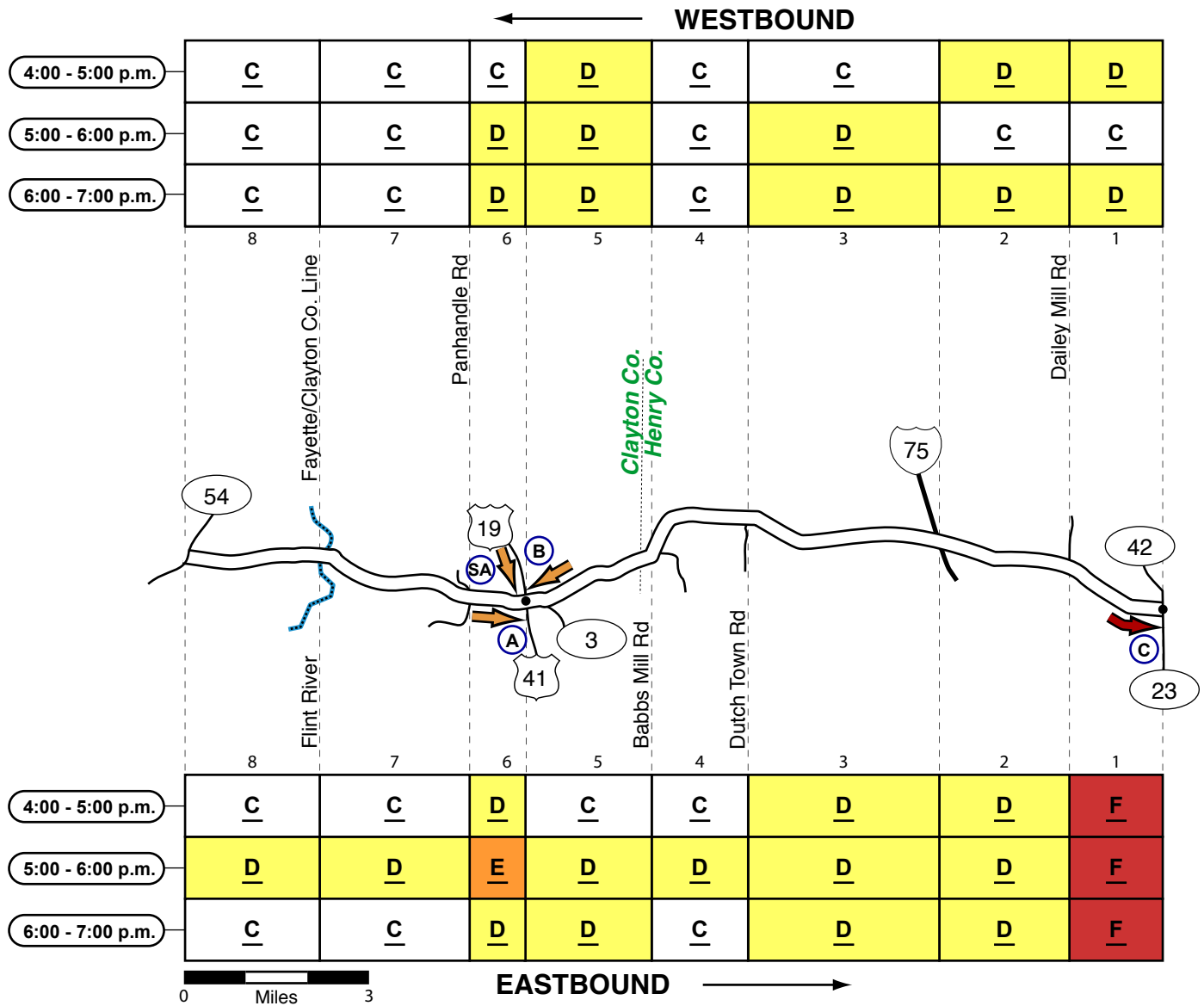
C
Congestion Type: Mainline Signal Queue
Location: Railroad Crossing west of SR 42
Frequency: Intermittent
Direction: Westbound
Queue Population: 20 to 60 vpl
Number of Lanes: 1

SA
Congestion Type: Surveyed Cross Road Signal Queue
Location: US 19/41
Frequency: Intermittent
Direction: Northbound
Queue Population: 20 to 55 vpl
Number of Lanes: 2

Arterial LOS Legend

| A | B | C | D | E | F |
|------------|-------|----------|-------|-----------|--------|
| Very Light | Light | Moderate | Heavy | Congested | Severe |

SR 920 (Fayette/Clayton & Henry Counties) - Evening



A
 Congestion Type: Mainline Signal Queue
 Location: US 19/41
 Frequency: Intermittent
 Direction: Eastbound
 Queue Population: 20 to 25 vpl
 Number of Lanes: 1

B
 Congestion Type: Mainline Signal Queue
 Location: US 19/41
 Frequency: Intermittent
 Direction: Westbound
 Queue Population: 20 to 25 vpl
 Number of Lanes: 1

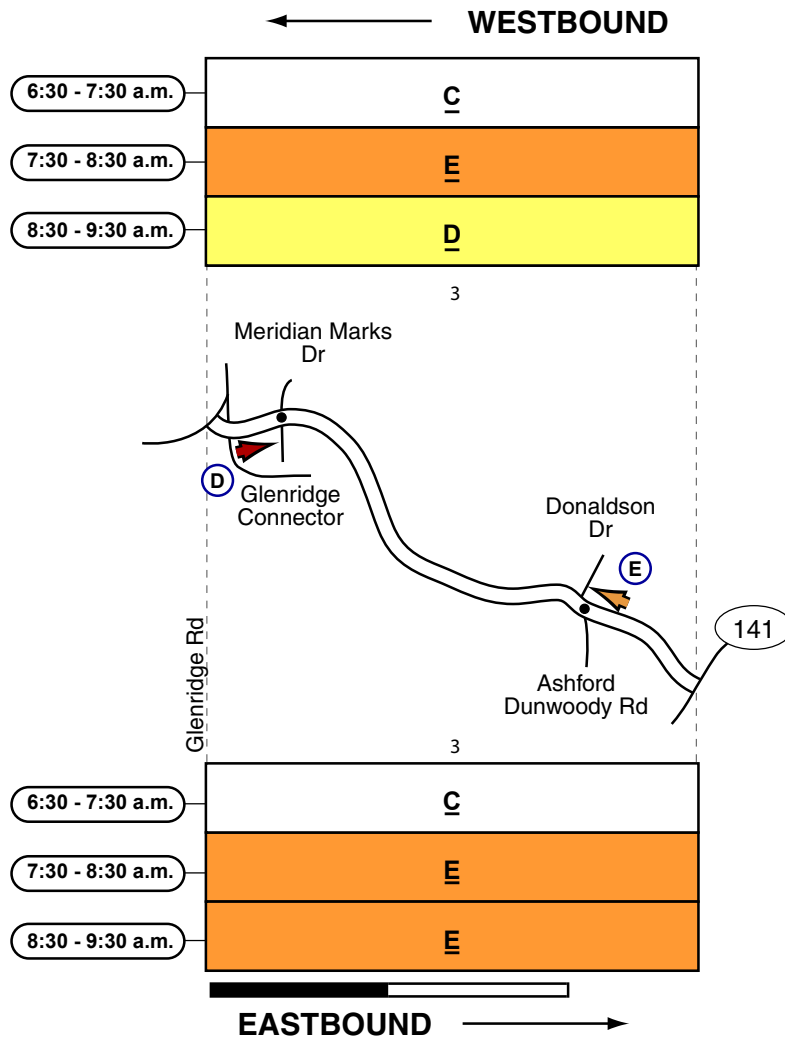
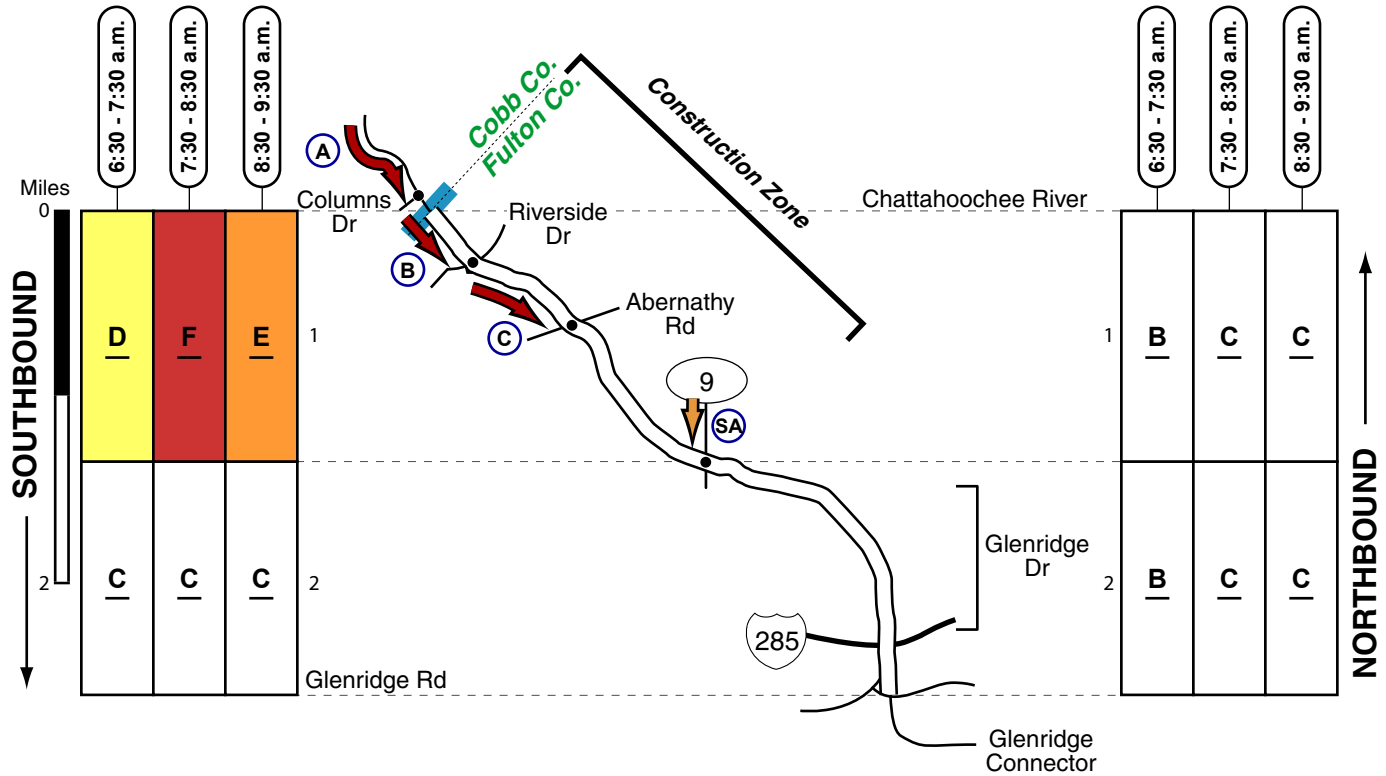
C
 Congestion Type: Mainline Signal Queue
 Location: SR 42
 Frequency: Most Observations
 Direction: Eastbound
 Queue Population: 20 to 60 vpl
 Number of Lanes: 1

SA
 Congestion Type: Surveyed Cross Road Signal Queue
 Location: US 19/41
 Frequency: Intermittent
 Direction: Southbound
 Queue Population: 20 to 30 vpl
 Number of Lanes: 2

Arterial LOS Legend

| A | B | C | D | E | F |
|------------|-------|----------|-------|-----------|--------|
| Very Light | Light | Moderate | Heavy | Congested | Severe |

SR 947- Johnson Ferry Rd/Glenridge Connector (Cobb & Fulton Counties) - Morning



Arterial LOS Legend

| | | | | | |
|------------|----------|----------|----------|-----------|----------|
| <u>A</u> | <u>B</u> | <u>C</u> | <u>D</u> | <u>E</u> | <u>F</u> |
| Very Light | Light | Moderate | Heavy | Congested | Severe |

SR 947- Johnson Ferry Rd/Glenridge Connector (Cobb & Fulton Counties) - Morning**A**

Congestion Type: Mainline Signal Queue

Location: Columns Dr

Frequency: Peak Hour

Direction: Southbound

Number of Lanes: 2

Note: While SR 947 in Cobb County was not in the survey area, southbound congestion was documented approaching the signal at Columns Dr. During several observations, extensive southbound congestion was found approaching Columns Dr and the Chattahoochee River.

B

Congestion Type: Mainline Signal Queue

Location: Riverside Dr

Frequency: Peak Hour

Direction: Southbound

Queue Population: 20 to 30 vpl

Number of Lanes: 2

Note: Intermittently, southbound congestion approaching Riverside Dr backed through the upstream signal at Columns Dr.

C

Congestion Type: Mainline Signal Queue

Location: Abernathy Rd

Frequency: Peak Hour

Direction: Southbound

Queue Population: 20 to 80 vpl

Number of Lanes: 2

D

Congestion Type: Mainline Signal Queue

Location: Meridian Marks Dr

Frequency: Intermittent

Direction: Southbound

Queue Population: 20 to 30 vpl

Number of Lanes: 2

E

Congestion Type: Mainline Signal Queue

Location: Donaldson Dr

Frequency: Intermittent

Direction: Northbound

Queue Population: 20 to 35 vpl

Number of Lanes: 1

SA

Congestion Type: Surveyed Cross Road Signal Queue

Location: SR 9

Frequency: Intermittent

Direction: Southbound

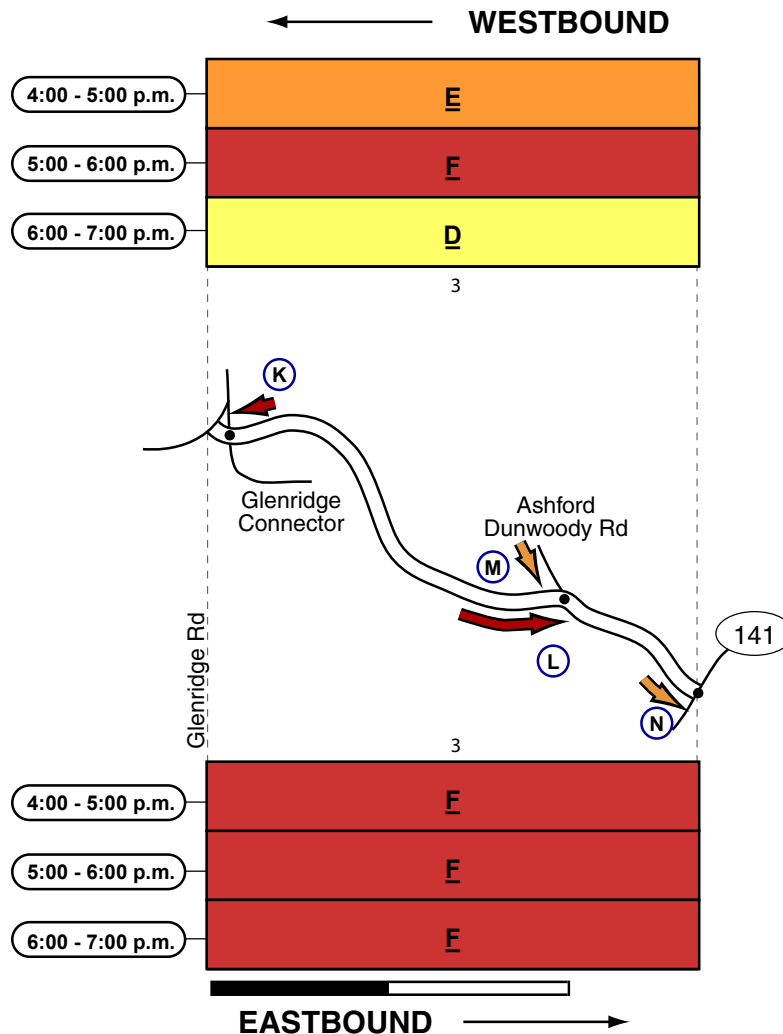
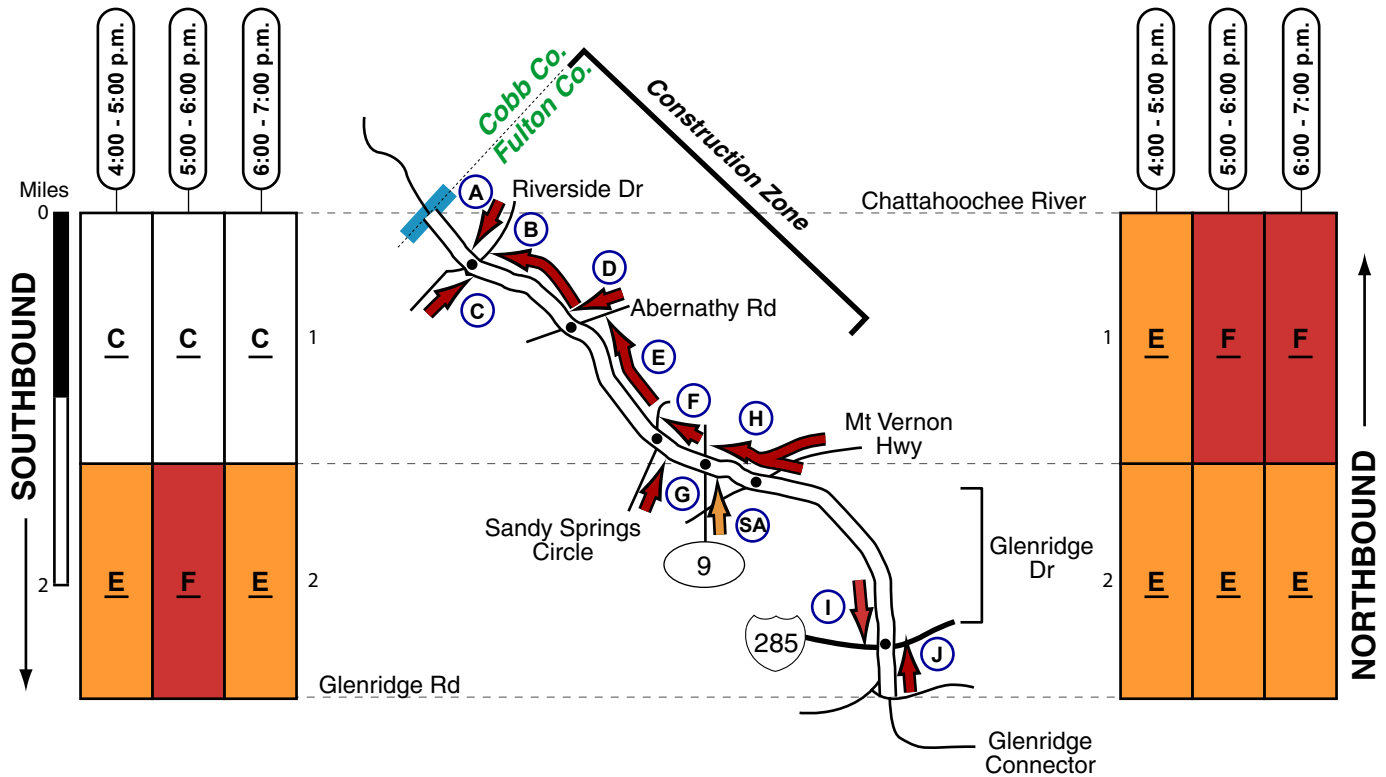
Queue Population: 20 to 30 vpl

Number of Lanes: 2

Arterial LOS Legend

| <u>A</u> | <u>B</u> | <u>C</u> | <u>D</u> | <u>E</u> | <u>F</u> |
|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|
| Very Light | Light | Moderate | Heavy | Congested | Severe |

SR 947- Johnson Ferry Rd/Glenridge Connector (Cobb & Fulton Counties) - Evening



Arterial LOS Legend

| A | B | C | D | E | F |
|------------|-------|----------|-------|-----------|--------|
| Very Light | Light | Moderate | Heavy | Congested | Severe |

SR 947- Johnson Ferry Rd/Glenridge Connector (Cobb & Fulton Counties) - Evening

A
Congestion Type: Cross Road Signal Queue
Location: Riverside Dr
Frequency: Most Observations
Direction: Southbound
Queue Population: 20 to 30 vpl
Number of Lanes: 1

B
Congestion Type: Mainline Signal Queue
Location: Riverside Dr
Frequency: Most Observations
Direction: Northbound
Number of Lanes: 1
Note: During the peak period, northbound congestion approaching Riverside Rd typically extended back to the vicinity of Abernathy Rd (a distance of approximately one mile).

C
Congestion Type: Cross Road Signal Queue
Location: Riverside Dr
Frequency: Most Observations
Direction: Northbound
Queue Population: 20 to 40 vpl
Number of Lanes: 1

D
Congestion Type: Cross Road Signal Queue
Location: Abernathy Rd
Frequency: Peak Hour
Direction: Westbound
Queue Population: 20 to 40 vpl
Number of Lanes: 1

E
Congestion Type: Mainline Signal Queue
Location: Abernathy Rd
Frequency: Most Observations
Direction: Northbound
Number of Lanes: 1
Note: During most observations, northbound congestion approaching Abernathy Rd extended back to the vicinity of Sandy Springs Rd (a distance of approximately one mile).

F
Congestion Type: Mainline Signal Queue
Location: Sandy Springs Circle
Frequency: Most Observations
Direction: Northbound
Queue Population: 20 to 40 vpl
Number of Lanes: 1
Note: During most observations, throughput at the signal at Sandy Springs Rd appeared to be adversely affected by downstream congestion on Johnson Ferry Rd (downstream bottleneck at the signal at Riverside Dr).

G
Congestion Type: Cross Road Signal Queue
Location: Sandy Springs Circle
Frequency: Most Observations
Direction: Northbound
Queue Population: 20 to 35 vpl
Number of Lanes: 1
Note: The head of the queue was found in the left-turn bay; congestion typically extended back into the left lane on Sandy Springs Rd.

H
Congestion Type: Mainline Signal Queue
Location: SR 9 & Mt Vernon Hwy
Frequency: Most Observations
Direction: Northbound
Queue Population: 20 to 40 vpl
Number of Lanes: 1
Note: Northbound congestion on Johnson Ferry Rd was found alternately at the signals at Mt Vernon Hwy and SR 9; westbound congestion was also typically found on Mt Vernon Hwy approaching the signal at SR 947.

I
Congestion Type: Right-Turn Queue
Location: I-285
Frequency: Most Observations
Direction: Southbound
Queue Population: 20 to 60 vpl
Number of Lanes: 2
Note: During most observations, congestion was more severe in the right lane approaching the I-285 Interchange; vehicles in the right lane could access the ramp to westbound I-285.

J
Congestion Type: Left-Turn Queue
Location: I-285
Frequency: Most Observations
Direction: Northbound
Queue Population: 20 to 30 vpl
Number of Lanes: 1
Note: When congested, vehicles were queued in the dedicated left turn lane waiting to turn onto the I-285 westbound entrance ramp.

K
Congestion Type: Mainline Signal Queue
Location: Glenridge Connector
Frequency: Peak Hour
Direction: Northbound
Queue Population: 20 to 50 vpl
Number of Lanes: 2

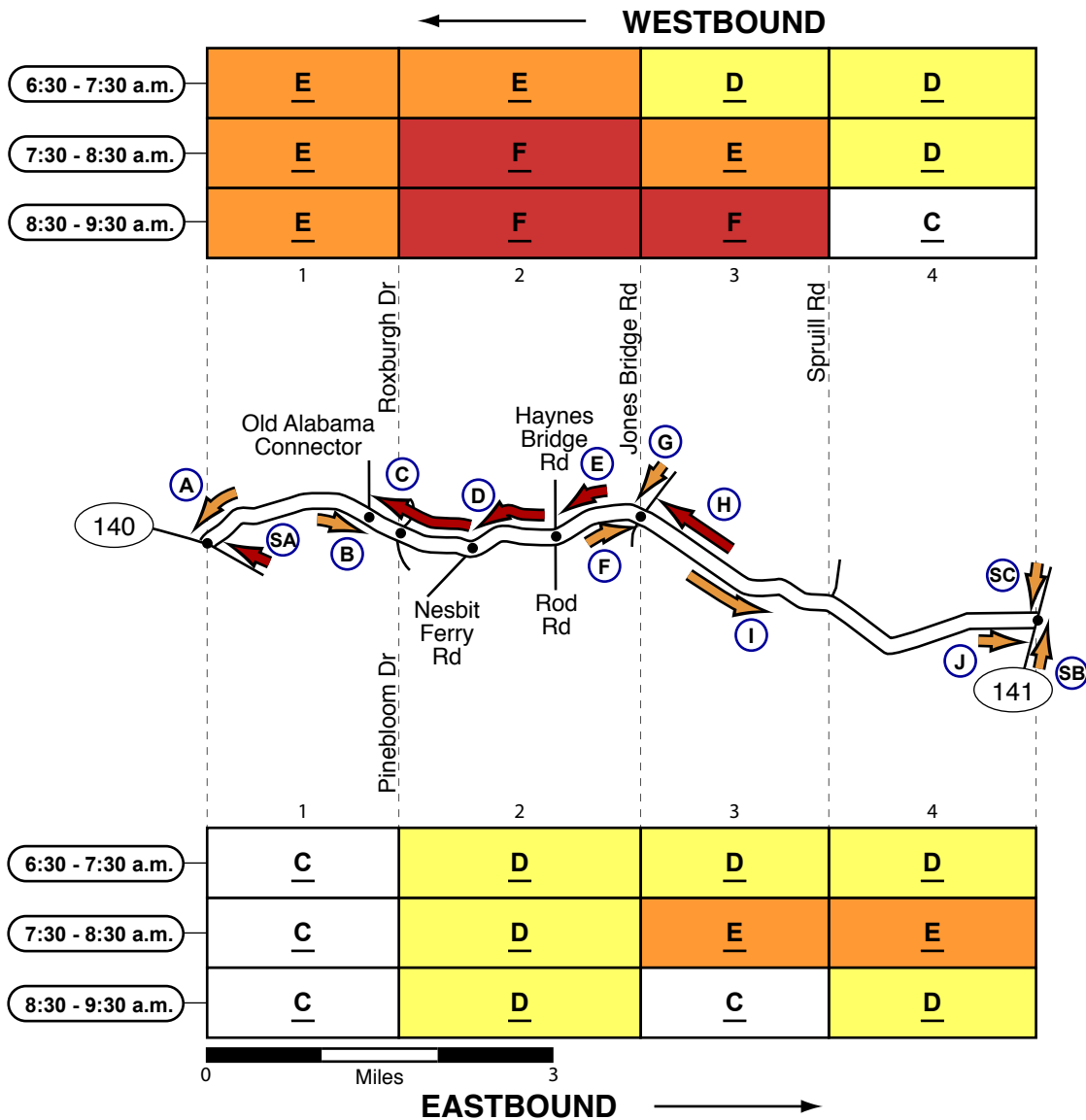
L
Congestion Type: Mainline Signal Queue
Location: Ashford Dunwoody Rd
Frequency: Most Observations
Direction: Southbound
Queue Population: 20 to 100 vpl
Number of Lanes: 1
Note: The head of the queue was found alternately at the two signals at Ashford Dunwoody Rd. One signal for left-turning vehicles onto northbound Ashford Dunwoody Rd; one signal for through traffic continuing on SR 947.

M
Congestion Type: Cross Road Signal Queue
Location: Ashford Dunwoody Rd
Frequency: Intermittent
Direction: Southbound
Queue Population: 20 to 35 vpl
Number of Lanes: 1

N
Congestion Type: Mainline Signal Queue
Location: SR 141
Frequency: Intermittent
Direction: Southbound
Queue Population: 20 to 25 vpl
Number of Lanes: 2
Note: When congested, vehicles were queued in the two dedicated left-turn lanes waiting to turn onto northbound SR 141.

SA
Congestion Type: Surveyed Cross Road Signal Queue
Location: SR 9
Frequency: Intermittent
Direction: Northbound
Queue Population: 20 to 40 vpl
Number of Lanes: 2

SR 961 - Old Alabama Road (Fulton County) - Morning



SR 961 - Old Alabama Road (Fulton County) - Morning

A

Congestion Type: Mainline Signal Queue

Location: SR 140

Frequency: Intermittent

Direction: Westbound

Queue Population: 20 to 30 vpl

Number of Lanes: 1

Note: When congested vehicles were queued in the right lane on Old Alabama Rd approaching the signal at SR 140; vehicles at the head of the queue (dedicated right-turn lane) typically turned into northbound congestion on SR 140.

B

Congestion Type: Left-Turn Queue

Location: Old Alabama Rd Connector

Frequency: Intermittent

Direction: Eastbound

Queue Population: 20 to 40 vpl

Number of Lanes: 1

C

Congestion Type: Mainline Signal Queue

Location: Old Alabama Rd Connector & Roxburgh Dr

Frequency: Most Observations

Direction: Westbound

Queue Population: 20 to 100 vpl

Number of Lanes: 1

Note: During the peak period, westbound congestion approaching the signals at Old Alabama Rd Connector and Roxburgh Rd often extended back to Nesbit Ferry Rd (a distance of approximately one mile).

D

Congestion Type: Mainline Signal Queue

Location: Nesbit Ferry Rd

Frequency: Most Observations

Direction: Westbound

Queue Population: 20 to 100 vpl

Number of Lanes: 1

Note: Westbound congestion approaching Nesbit Ferry Rd often extended back through the upstream signal at Haynes Bridge Rd.

E

Congestion Type: Mainline Signal Queue

Location: Haynes Bridge Rd

Frequency: Most Observations

Direction: Westbound

Queue Population: 20 to 50 vpl

Number of Lanes: 1

Note: During the peak period, downstream congestion approaching Nesbit Ferry Rd typically extended back through the signal at Haynes Bridge Rd; westbound congestion at Haynes Bridge Rd often extended back through the upstream signals at County Park and Brumbelow Rd.

F

Congestion Type: Left-Turn Queue

Location: Jones Bridge Rd

Frequency: Intermittent

Direction: Eastbound

Queue Population: 20 to 25 vpl

Number of Lanes: 1

G

Congestion Type: Cross Road Signal Queue

Location: Jones Bridge Rd

Frequency: Intermittent

Direction: Southbound

Queue Population: 20 to 30 vpl

Number of Lanes: 1

H

Congestion Type: Mainline Signal Queue

Location: Jones Bridge Rd

Frequency: Most Observations

Direction: Westbound

Queue Population: 20 to 70 vpl

Number of Lanes: 1

I

Congestion Type: Platoons

Location: Between Jones Bridge Rd & Spruill Rd

Frequency: Intermittent

Direction: Eastbound

Platoon Population: 25 to 35 vpl

Number of Lanes: 1

J

Congestion Type: Left-Turn Queue

Location: SR 141

Frequency: Intermittent

Direction: Eastbound

Queue Population: 20 to 25 vpl

Number of Lanes: 2

Note: When congested, vehicles were queued in the two left-turn lanes at SR 141 (terminus of Old Alabama Rd).

SA

Congestion Type: Surveyed Cross Road Signal Queue

Location: SR 140

Frequency: Most Observations

Direction: Northbound

Queue Population: 20 to 100 vpl

Number of Lanes: 2

Note: During the peak period, northbound congestion at Old Alabama Rd typically extended back through the upstream signals at Holcomb Woods Pkwy and Terramont Dr.

SB

Congestion Type: Surveyed Cross Road Signal Queue

Location: SR 141

Frequency: Intermittent

Direction: Northbound

Queue Population: 20 to 35 vpl

Number of Lanes: 2

SC

Congestion Type: Surveyed Cross Road Signal Queue

Location: SR 141

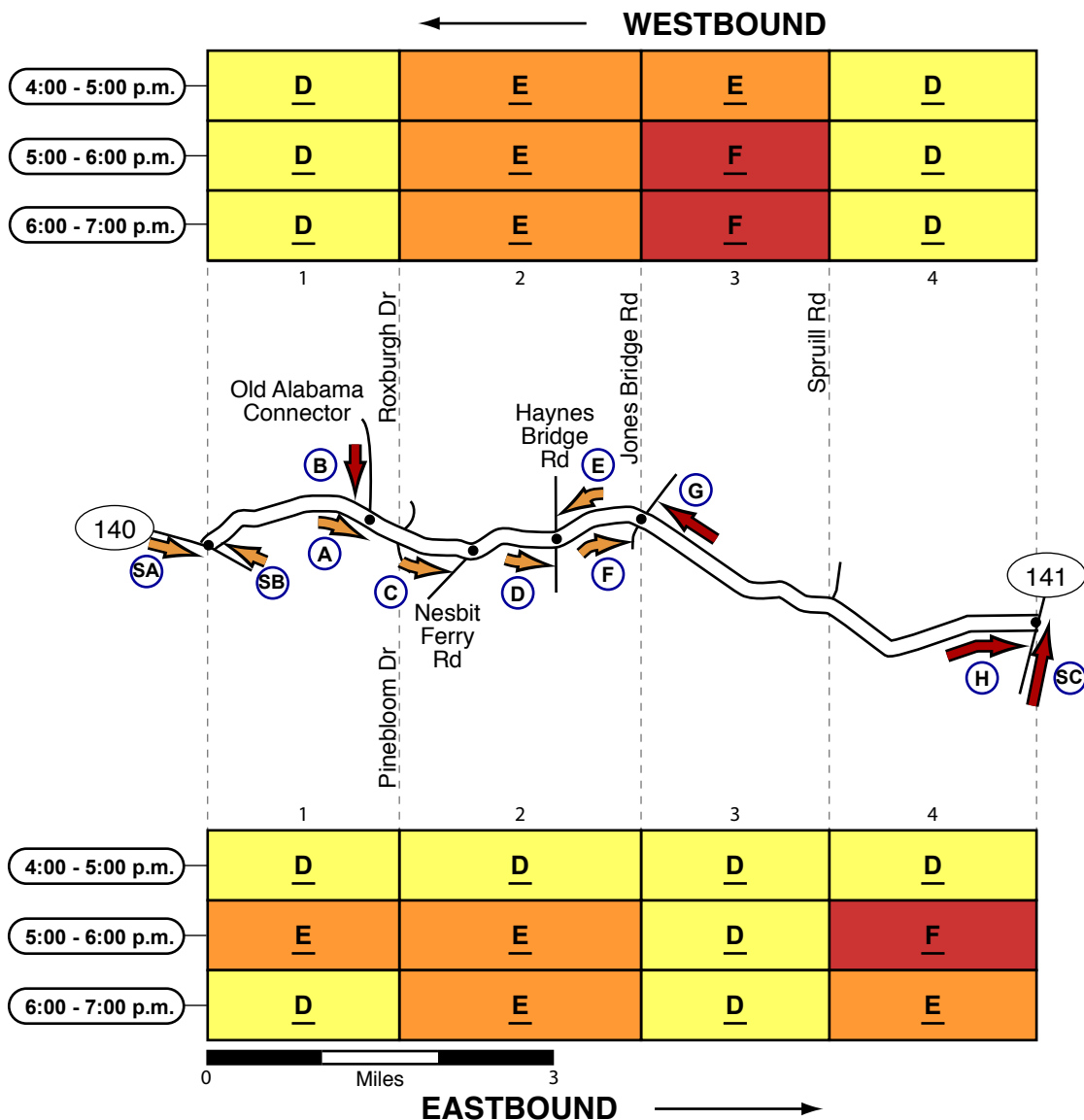
Frequency: Intermittent

Direction: Northbound

Queue Population: 20 to 35 vpl

Number of Lanes: 2

SR 961 - Old Alabama Road (Fulton County) - Evening



SR 961 - Old Alabama Road (Fulton County) - Evening

A

Congestion Type: Mainline Signal Queue
Location: Old Alabama Rd Connector
Frequency: Intermittent
Direction: Eastbound
Queue Population: 20 to 30 vpl
Number of Lanes: 1

B

Congestion Type: Cross Road Signal Queue
Location: Old Alabama Rd Connector
Frequency: Most Observations
Direction: Southbound
Queue Population: 20 to 50 vpl
Number of Lanes: 1

C

Congestion Type: Mainline Signal Queue
Location: Nesbit Ferry Rd
Frequency: Intermittent
Direction: Eastbound
Queue Population: 20 to 25 vpl
Number of Lanes: 1
Note: When congested, the head of the queue was found in the dedicated left-turn lane (to continue eastbound on Old Alabama Rd).

D

Congestion Type: Mainline/Left-Turn Signal Queue
Location: Haynes Bridge Rd
Frequency: Intermittent
Direction: Eastbound
Queue Population: 20 to 25 vpl
Number of Lanes: 1

E

Congestion Type: Mainline Signal Queue
Location: Haynes Bridge Rd
Frequency: Intermittent
Direction: Westbound
Queue Population: 20 to 30 vpl
Number of Lanes: 1

F

Congestion Type: Mainline/ Left-Turn Signal Queue
Location: Jones Bridge Rd
Frequency: Intermittent
Direction: Eastbound
Queue Population: 20 to 30 vpl
Number of Lanes: 1
Note: Eastbound congestion at Jones Bridge Rd was found alternately in the one dedicated left-turn lane and the one thru-lane.

G

Congestion Type: Mainline Signal Queue
Location: Jones Bridge Rd
Frequency: Most Observations
Direction: Westbound
Queue Population: 20 to 70 vpl
Number of Lanes: 1

H

Congestion Type: Left-Turn Queue
Location: SR 141
Frequency: Most Observations
Direction: Eastbound
Queue Population: 20 to 55 vpl
Number of Lanes: 2
Note: When congested, vehicles were queued in the two dedicated left-trun lanes at SR 141; vehicles turning right (southbound) on SR 141 appeared to bypass the queue without delay.

SA

Congestion Type: Surveyed Cross Road Signal Queue
Location: SR 140
Frequency: Intermittent
Direction: Southbound
Queue Population: 20 to 30 vpl
Number of Lanes: 2
Note: During some observations, ccongestion was found in the left turn bay at the signal at Old Alabama Rd.

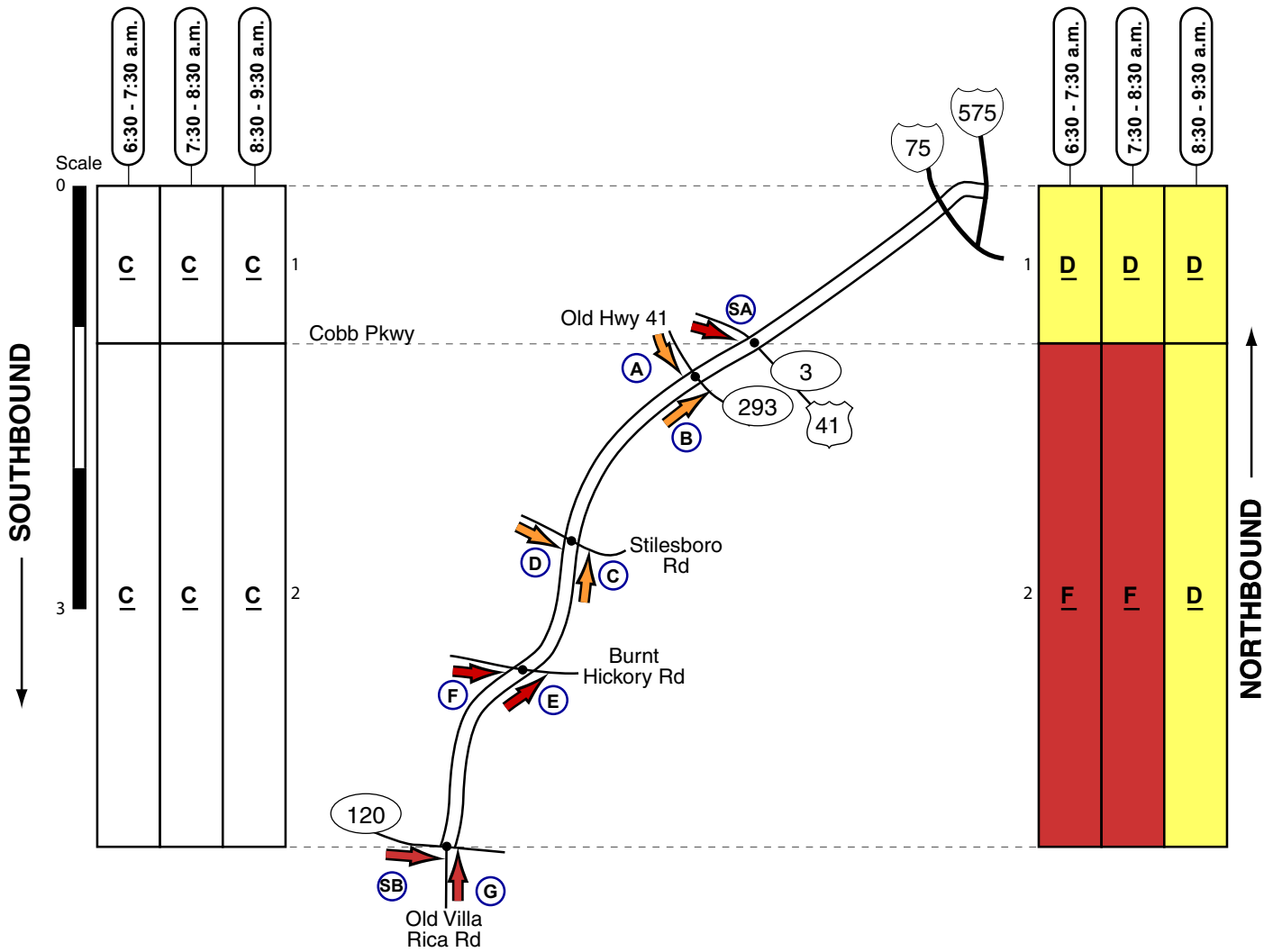
SB

Congestion Type: Surveyed Cross Road Signal Queue
Location: SR 140
Frequency: Intermittent
Direction: Northbound
Queue Population: 20 to 30 vpl
Number of Lanes: 2

SC

Congestion Type: Surveyed Cross Road Signal Queue
Location: SR 141
Frequency: Most Observations
Direction: Northbound
Number of Lanes: 2
Note: During the peak period, congestion typically extended back across the Chattahoochee River; on two of the mornings surveyed, congestion extended all the way back to Jones Bridge Rd (a distance of approximately 2 miles).

Barrett Parkway/Ridgeway Road (Cobb County) - Morning



Arterial LOS Legend

| A | B | C | D | E | F |
|------------|-------|----------|-------|-----------|--------|
| Very Light | Light | Moderate | Heavy | Congested | Severe |

Barrett Parkway/Ridgeway Road (Cobb County) - Morning

A

Congestion Type: Cross Road Signal Queue
 Location: Old Hwy 41 (SR 293)
 Frequency: Intermittent
 Direction: Eastbound
 Queue Population: 20 to 45 vpl
 Number of Lanes: 1

B

Congestion Type: Mainline Signal Queue
 Location: Old Hwy 41 (SR 293)
 Frequency: Intermittent
 Direction: Northbound
 Queue Population: 20 to 40 vpl
 Number of Lanes: 2

C

Congestion Type: Mainline Signal Queue
 Location: Stilesboro Rd
 Frequency: Intermittent
 Direction: Northbound
 Queue Population: 20 to 40 vpl
 Number of Lanes: 2

D

Congestion Type: Cross Road Signal Queue
 Location: Stilesboro Rd
 Frequency: Intermittent
 Direction: Eastbound
 Queue Population: 20 to 30 vpl
 Number of Lanes: 1

E

Congestion Type: Mainline Signal Queue
 Location: Burnt Hickory Rd
 Frequency: Most observations between 7:00 and 8:00 a.m.
 Direction: Northbound
 Queue Population: 40 to 70 vpl
 Number of Lanes: 2

F

Congestion Type: Cross Road Signal Queue
 Location: Burnt Hickory Rd
 Frequency: Most Observations
 Direction: Eastbound
 Queue Population: 20 to 60 vpl
 Number of Lanes: 1

G

Congestion Type: Mainline Signal Queue
 Location: SR 120
 Frequency: Peak Hour
 Direction: Northbound
 Queue Population: 20 to 40 vpl
 Number of Lanes: 2

SA

Congestion Type: Surveyed Cross Road Signal Queue
 Location: SR 3
 Frequency: Peak Hour
 Direction: Southbound
 Queue Population: 20 to 40 vpl
 Number of Lanes: 2

SB

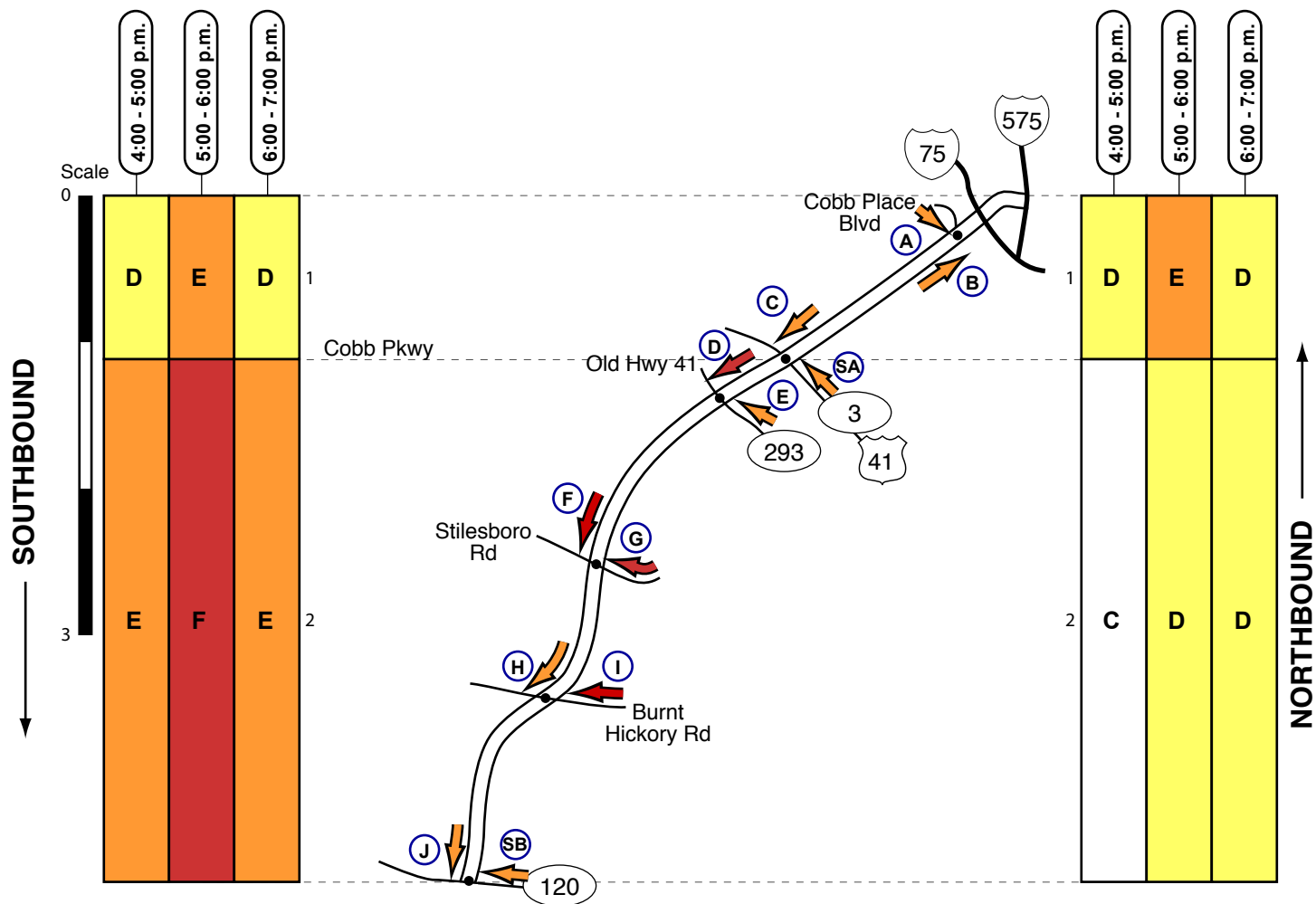
Congestion Type: Surveyed Cross Road Signal Queue
 Location: SR 120
 Frequency: Peak Hour
 Direction: Eastbound
 Queue Population: 20 to 40 vpl
 Number of Lanes: 2

Note: During some observations, congestion extended back through the upstream signal at Old Dallas Rd.

Arterial LOS Legend

| <u>A</u> | <u>B</u> | <u>C</u> | <u>D</u> | <u>E</u> | <u>F</u> |
|------------|----------|----------|----------|-----------|----------|
| Very Light | Light | Moderate | Heavy | Congested | Severe |

Barrett Parkway/Ridgeway Road (Cobb County) - Evening



Barrett Parkway/Ridgeway Road (Cobb County) - Evening

A

Congestion Type: Cross Road Signal Queue
 Location: Cobb Place Blvd
 Frequency: Intermittent
 Direction: Southbound
 Queue Population: 20 to 30 vpl
 Number of Lanes: 2
 Note: Congestion was found in the two left-turn lanes.

B

Congestion Type: Mainline Signal Queue
 Location: Cobb Place Blvd
 Frequency: Intermittent
 Direction: Northbound
 Queue Population: 20 to 30 vpl
 Number of Lanes: 3

C

Congestion Type: Mainline Signal Queue
 Location: SR 3/US 41
 Frequency: Intermittent
 Direction: Southbound
 Queue Population: 20 to 30 vpl
 Number of Lanes: 2

D

Congestion Type: Mainline Signal Queue
 Location: Old Hwy 41 (SR 293)
 Frequency: Peak Hour
 Direction: Southbound
 Queue Population: 20 to 40 vpl
 Number of Lanes: 2

E

Congestion Type: Cross Road Signal Queue
 Location: Old Hwy 41 (SR 293)
 Frequency: Intermittent
 Direction: Westbound
 Queue Population: 20 to 40 vpl
 Number of Lanes: 1

F

Congestion Type: Mainline Signal Queue
 Location: Stilesboro Rd
 Frequency: Peak Hour
 Direction: Southbound
 Queue Population: 30 to 70 vpl
 Number of Lanes: 2

G

Congestion Type: Cross Road Signal Queue
 Location: Stilesboro Rd
 Frequency: Peak Hour
 Direction: Westbound
 Queue Population: 20 to 60 vpl
 Number of Lanes: 1

H

Congestion Type: Mainline Signal Queue
 Location: Burnt Hickory Rd
 Frequency: Intermittent
 Direction: Southbound
 Queue Population: 20 to 30 vpl
 Number of Lanes: 2

I

Congestion Type: Cross Road Signal Queue
 Location: Burnt Hickory Rd
 Frequency: Peak Hour
 Direction: Westbound
 Queue Population: 40 to 50 vpl
 Number of Lanes: 1

J

Congestion Type: Mainline Signal Queue
 Location: SR 120 (Dallas Hwy)
 Frequency: Intermittent
 Direction: Southbound
 Queue Population: 20 to 40 vpl
 Number of Lanes: 2

SA

Congestion Type: Surveyed Cross Road Signal Queue
 Location: SR 3
 Frequency: Intermittent
 Direction: Northbound
 Queue Population: 20 to 40 vpl
 Number of Lanes: 2

SB

Congestion Type: Surveyed Cross Road Signal Queue
 Location: SR 120
 Frequency: Intermittent
 Direction: Westbound
 Queue Population: 20 to 40 vpl
 Number of Lanes: 2

Arterial LOS Legend

| A | B | C | D | E | F |
|------------|-------|----------|-------|-----------|--------|
| Very Light | Light | Moderate | Heavy | Congested | Severe |

APPENDIX A, VOLUME TWO

PROCEDURE FOR DETERMINING PERFORMANCE RATINGS: INTERRUPTED-FLOW ARTERIAL HIGHWAYS

Introduction

Overlapping aerial photography can document many useful characteristics of traffic flow on highway networks. The photographs can be invaluable for screening problem sites, winning support for ideas, and explaining decisions to others. If formal rules and procedures are applied to the analysis of aerial photographs, the photography can provide a cost-effective basis for periodically rating the performance of large highway systems on a link-by-link basis.

Background

On motorized vehicle highways, traffic flow is normally measured in terms of three basic parameters: *volume*, *speed*, and *density*. These parameters are related mathematically such that, if only two are known, the third can be calculated (volume equals speed times density). Other useful flow parameters related to speed are *travel time* and *delay* between specific points on a system.

The *Highway Capacity Manual (HCM)*, updated in 2000 by the Transportation Research Board of the National Research Council, is an authoritative governmental resource that has established a simplified concept by which the performance of all types of transportation facilities can be described and compared. This concept is called *level of service*, or *LOS*. For each type of facility, a single traffic flow parameter – the one deemed most appropriate by the committee that publishes the manual – is chosen to be the basis for defining six rating categories. These categories are represented by the letters “A” through “F”, ranging from the most favorable rating of LOS A (indicating high service quality associated with lightly-used facilities) to the poorest rating of LOS F (indicating a facility burdened by congestion or other undesirable performance characteristics). This LOS system, introduced in 1965 version of the HCM and revised periodically since, has been widely adopted for evaluating existing highway systems and planning future improvements. Because six LOS classes are easier to understand than tables of numbers, LOS has been widely used in the political process. In some jurisdictions, LOS standards are even found in legislation attempting to guide facility planning or control real estate development.

Part One: Interrupted-flow highways (highways with traffic signals)

Summary

Density is not an appropriate performance measure for interrupted-flow arterials since density measurements will fluctuate widely with uneven flow caused by traffic signals. Accordingly, the defining parameter of HCM LOS on interrupted-flow highways is *average travel speed*, which is calculated from travel time. Travel time is commonly measured by inserting probe vehicles into a traffic stream (called “floating cars”), and recording travel times between key intersections; an alternative method is to record and match hundreds of license plate numbers at various points along a study corridor, and then calculate the associated travel times and speeds. These methods are widely used on commuter highways of all types, and have the advantage of providing actual HCM LOS on interrupted-flow highways – something that aerial photography cannot do on a large-scale basis.

Travel time methods are limited, however, in that they do not provide information regarding how heavily facilities are being used (that is normally accomplished with some form of volume determination). They also do not provide insight as to the underlying causes of congestion, or the degree to which congestion exists on cross streets or along merging routes. Aerial photography can provide this information, with the added benefit that the actual photographs can be used for inspection or documentation. For example, without traveling to the field, transportation specialists can view bottlenecks, look for causes, and sometimes even consider the feasibility of potential corrective actions. For example, is the problem caused by a specific turning movement within the intersection? Might it be feasible to add a turning lane? Are cross streets free of congestion (so we can consider adding “green” signal-time to the primary route)? How much worse has this become over the last three years? Should we include this site on our study list? The photographs then become supporting documentation for subsequent recommendations by engineers and funding decisions by elected officials.

Therefore, even though aerial photography cannot supply HCM LOS on interrupted-flow highways, the potential benefits of the approach are such that Skycomp was asked to develop a *surrogate* LOS performance measure – one that could be obtained cost-effectively from aerial photography, and could be used to monitor and document facility performance over time.

Surrogate LOS rating system developed by Skycomp.

Skycomp began by recognizing that the *HCM* supplies qualitative descriptions of the general nature of traffic flow associated with each LOS. For example, for LOS A, the *HCM* states:

“LOS A describes primarily free-flow operations at average travel speeds, [usually about 90% of the free flow speed for the given street class]. Vehicles are completely unimpeded in their ability to maneuver within the traffic stream. Control delay at signalized intersections is minimal.” (*Travel-time definition highlighted in brackets.*)

At the other extreme, the *HCM* states:

“LOS F is characterized by urban street flow at extremely low speeds, [typically one-third to one-fourth of the free-flow speed]. Intersection congestion is likely at critical signalized locations, with high delays, high volumes and extensive queuing.”

Because aerial photographs show actual conditions on each highway link, they can be used to classify general levels of demand and congestion in a manner reasonably consistent with the six HCM descriptions. Skycomp developed and formalized such a system, which was introduced in 1995*. This rating system was developed under the following constraints:

- Like HCM LOS, the surrogate rating scale must consist of six classes labeled “A” through “F”. These classes must cover the full range of traffic conditions found on interrupted-flow highways, from empty to densely congested highways, with reasonable gradations in between. Ratings must be generally consistent with the qualitative descriptions of traffic flow associated with each LOS class in the HCM.
- The procedure must produce consistent results, so that different trained persons will generally assign the same ratings when analyzing with the same photographs.
- The procedure must produce ratings that are not sensitive to the time the photographs were taken relative to the signal cycle.

Definition of Surrogate LOS Performance Ratings

Skycomp’s system relies on assessing the nature of vehicle platoons and the extent of queuing found at signalized intersections. Accordingly, the six surrogate LOS performance ratings used in this survey of interrupted-flow highways are defined as follows. (Because they are surrogate LOS measures, they are underlined for differentiation from HCM LOS):

Surrogate LOS Performance Rating A:

— Very few vehicles are using the highway; the highway is virtually deserted. *[HCM qualitative description for LOS A: Vehicles are completely unimpeded in their ability to maneuver within the traffic stream; free-flow operations.]*

Surrogate LOS Performance Rating B:

— Traffic flow is light; there is little or no grouping of vehicles (“platooning”). *[HCM qualitative description for LOS B: reasonably unimpeded operations; ability to maneuver only slightly restricted.]*

Surrogate LOS Performance Rating C:

—Traffic flow is moderate (not heavy, not light). There are enough vehicles to form into distinct platoons, but platoon populations do not exceed 15 vehicles per lane. *[HCM qualitative description for LOS C: stable operations; some restrictions to ability to maneuver.]*

Surrogate LOS Performance Rating D:

—Traffic flow is heavy; there are many cars on the road. Significant queuing is found at signals, but all queued vehicles are expected to clear the signal on “green” (there are less than 20 vehicles per lane queued at all signals in the segment). Platoons contain at least 15 but do not exceed 25 vehicles per lane. *[HCM qualitative description for LOS D: borders on unstable flow where small increases in flow may cause substantial decreases in travel speed.]*

Surrogate LOS Performance Rating E:

— Traffic flow is congested. The segment may contain one or two signalized intersections with queues of more than 20 vehicles per lane (all vehicles may not clear on “green”). Platoon populations exceed 25 vehicles per lane. (On long one-lane segments, the movement of vehicles may resemble a funeral procession, with little opportunity for side-traffic to enter the roadway.) *[HCM qualitative description for LOS E: significant delays and low average travel speeds; typical causes include adverse progression, high signal density, high volumes, extensive delays at critical intersections, and inappropriate signal timing.]*

Surrogate LOS Performance Rating F:

— Traffic flow is severely congested. This involves vehicles backing through an upstream signal, or for the length of the segment; a series of closely-spaced intersections with more than 20 vehicles per lane queued at each; or the segment contains one severely congested intersection, with more than 40 vehicles per lane queued approaching the signal (it may take two or more signal cycles to clear the intersection). *[HCM qualitative description for LOS F: flow at extremely low speeds; high delays and extensive queuing likely at critical intersections.]*

These are the definitions that were used in evaluating the interrupted-flow highways for each of the surveys conducted in 2004 and 2008.

Photo analysis procedures

Prior to the beginning of photo analysis, each surveyed highway was segmented into sections between major intersections or crossroads (segments were normally two to three miles in length; however, some segments were as short as one mile or as long as five miles, depending primarily on the density of traffic signals).

LOS ratings were assigned one segment at a time, by direction, based on the parameters of the surrogate LOS system described above. For each segment, all associated photographs were laid out and oriented for simultaneous viewing. The analyst began by considering the segment a surrogate LOS C; from the photographs, a determination was then made if the conditions warranted that LOS rating. If so, the assignment of LOS C was made. If not, the analyst adjusted the LOS rating upward or downward as warranted by the conditions.

In the event that an incident or temporary roadwork significantly affected the rating, the evaluator attached a code that would later exclude the affected data from being compared to the results of other survey flights.

After a quality-control review by the senior analyst, all individual LOS ratings were digitized and entered into a computer database program for compilation and evaluation. LOS Ratings were printed by time slice and by day, so that unusual ratings could be identified. For example, if “B” or “C” LOS ratings were assigned on three days and an “E” LOS rating on one day, the photography was checked for possible error or incident. If the data were clearly atypical but a cause could not be identified, a code “u” (“unknown”) was attached to the data (like the incident and roadwork codes, this would flag the data for exclusion when determining predominant LOS ratings).

Skycomp's senior analyst then reviewed the photography at each bottleneck location (performance rating "E" or "F"), verified LOS ratings assigned by the analyst, and prepared a text entry summarizing details at the site. For example:

Summary detail note (US 78 - Morning):

Congestion Type: Signal Queue

Intersection: Wisteria Dr

Frequency: Most observations

Direction: Westbound

Queue Populations: 20 to 100 vehicles per lane

Number of Lanes: One

For each bottleneck, photographs were also selected that best illustrated the congestion that was found. Digital versions of these photos were then labeled as appropriate, and set aside for incorporation later into the interactive digital slide show.

Next, revisions were made to the database as appropriate; average LOS ratings were then generated for inclusion in the performance rating tables in Part One.

* (Skycomp developed its system to the HCM LOS descriptions that were current in 1995. The qualitative descriptions associated with each LOS rating were not materially revised in HCM 2000.)